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# BEST PRACTICES

Methadone Maintenance Treatment



Canada



## **Best Practices**

# **Methadone Maintenance Treatment**

**Office of Canada's Drug Strategy  
Health Canada**

Our mission is to help the people of Canada  
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Tel.: (613) 954-5995  
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© Minister of Public Works and Government Services Canada, 2002  
Cat. H49-164/2002E  
ISBN 0-662-31812-9

## **Preface**

Methadone maintenance treatment is a key component of a comprehensive treatment and prevention strategy to address opioid dependence and its consequences. A review of the literature (Health Canada, 2002) indicates that methadone maintenance treatment is considered an effective means of reducing the use of other opioids, the use of other substances, criminal activity, and the rate of mortality. Methadone maintenance treatment has also been found to reduce injection-related risk behaviours, other risk behaviours for transmission of human immunodeficiency virus (HIV) and sexually transmitted diseases, and the transmission of HIV (and potentially the transmission of hepatitis C virus (HCV) and other blood-borne pathogens). Methadone maintenance treatment improves physical and mental health, social functioning, quality of life, and pregnancy outcomes. Methadone maintenance treatment has also been found to increase retention in treatment. Health Canada, in collaboration with the provinces and territories, is involved in efforts to increase access to effective methadone maintenance programs.<sup>1</sup> Part of these efforts includes the development of this document.

This best practices document is intended to help improve the effectiveness of current programs and encourage the establishment of new programs. This document is an educational tool which synthesizes knowledge about best practices in methadone maintenance treatment design and delivery. It contributes to an ongoing process of knowledge development and education for policy makers and health and social services professionals responding to the issue of opioid dependence.

Providing this information is not intended to tell policy makers or people working in the field what they *must* do; rather, it provides a summary of what current research and expert opinion – from within Canada and abroad – indicate are the best practices in the field of methadone maintenance treatment. It focuses on what a comprehensive approach to effective, accessible methadone maintenance treatment should look like, and how to achieve it.

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<sup>1</sup> For purposes of this document, a methadone maintenance treatment “program” encompasses the full continuum of treatment delivery modes and communities – from physicians in private practice who prescribe methadone to patients, to multi-service centres that provide a range of services and supports including methadone maintenance treatment, other substance use treatment and rehabilitation services, mental health services, and medical services.

**This best practices resource has been developed as a stand-alone information source, in that it is not intended to replace, but rather to serve as a companion to, existing federal or provincial guidelines for methadone maintenance treatment. For further information on providing methadone maintenance treatment, readers must consult the current national guidelines (Health and Welfare Canada, 1992) and provincial guidelines, where these exist or are being developed.<sup>2</sup> In addition, readers are encouraged to consult the literature review report which is a companion to this report and was produced on behalf of Canada's Drug Strategy Division (see Health Canada, 2002). A brochure based on this report is also available (see Health Canada 2002b).**

#### **Note**

In developing this document, the Investigator Team referred to sources that are believed to be reliable. This document, however, is not intended to provide readers with sufficient information to prescribe or dispense methadone.

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**2** Several provinces have created, or are in the process of creating, their own guidelines. In these jurisdictions, the provincial guidelines are intended to replace the national guidelines.

## **Acknowledgements**

This document was developed on behalf of the Office of Canada's Drug Strategy, Health Canada. The Investigator Team included Dr. Bruna Brands, Centre for Addiction and Mental Health; Dr. David Marsh, Centre for Addiction and Mental Health; Ms. Liz Hart, Jamieson, Beals, Lalonde and Associates, Inc.; Ms. Wanda Jamieson, Jamieson, Beals, Lalonde and Associates, Inc.. The project was carried out under the guidance of the federal/provincial/territorial Steering Committee on Best Practices in Methadone Maintenance Treatment.

The Investigator Team would like to thank the Steering Committee, the Canadian and International experts who were interviewed as well as service providers, clients/patients and client/patient advocates and regulatory bodies who contributed to the development of this document.



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# **Section 1. Introduction**

## **1.1 Purpose of this Document**

This document is part of an ongoing effort supported by Canada's Drug Strategy to increase access to effective methadone maintenance treatment programs in Canada by promoting and disseminating information on effective strategies to implement methadone maintenance treatment.

As noted in the Preface, this document is not intended to replace, but rather to accompany, existing national or provincial guidelines. Readers must consult the federal guidelines (Health and Welfare Canada, 1992) and existing provincial guidelines for further information on providing methadone maintenance treatment.

This document provides information on evidence-based best practices in methadone maintenance treatment, and the key components of comprehensive methadone maintenance treatment programs.

Links to the published literature are noted throughout the document. A list of references and further suggested reading is included at the end of the document. All other non-referenced material represents the wealth of clinical and consumer wisdom and experience contributed by the many individuals who were consulted during the course of the project.

In this document, the sections entitled "Insights from the Field" represent a summary of some of the comments derived from the three consultation meetings held with experts in the field of methadone maintenance treatment.

Ideally, this document will contribute to:

- increased awareness among practitioners and service providers;
- engagement and retention of clients/patients<sup>3</sup>; and
- improved treatment outcomes.

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<sup>3</sup> Due to the wide range of practitioners and sectors involved in delivering MMT in Canada, this document uses the term "client/patient" rather than either "client" or "patient".

## 1.2 Who Is the Intended Audience for this Document?

This document has been developed for use by the many different groups of people who are involved in delivering methadone maintenance treatment in Canada including, among others:

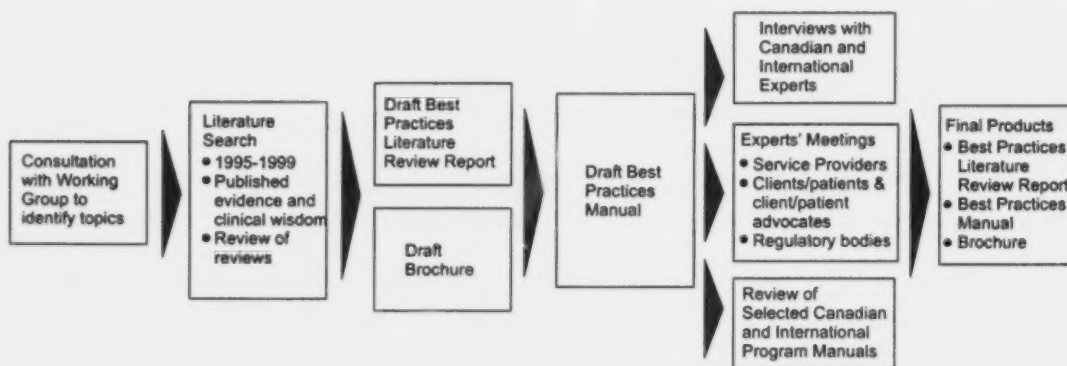
- physicians;
- pharmacists;
- nurses;
- psychologists;
- other health care practitioners; and
- service providers working in the fields of substance use treatment and rehabilitation, mental health, social services, and corrections.

The document is also designed for use by policy and program developers and decision makers who are working in – and across – federal, provincial and territorial government departments and agencies to increase access to methadone maintenance treatment in Canada.

Although this document was not written explicitly for clients/patients or their families, the information it contains may be useful for them as well.

## 1.3 Development of this Document

### Development Process for MMT Best Practices Products



This document is based on:

- the findings of an extensive literature review which identified evidence-based best practices in methadone maintenance treatment (Health Canada, 2002a);<sup>4</sup>
- a review of selected Canadian and international methadone maintenance treatment program manuals to identify practices that are consistent with the evidence of effectiveness; and
- the Investigator Team's critical assessment of all comments and suggestions provided by the individuals who participated in the extensive consultation process which included:
  - interviews with 33 Canadian and international experts including physicians, nurses, pharmacists, substance use treatment providers and researchers; and
  - a series of three expert meetings held with service providers (physicians, psychologists, nurses, pharmacists, and substance use treatment providers); clients/patients and client/patient advocates, and representatives of key professional bodies (including the medical licensing bodies, and some pharmacy regulatory bodies).

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4 In addition to the original literature search for the period 1995-1999, a selection of key 2000 publications were reviewed. The evidence from the published literature is summarized in the literature review report (see Health Canada, 2002a). References to the evidence presented in the literature are also included throughout this document. There is now almost forty years of accumulated research knowledge and treatment literature concerning MMT. This report relies, in large part, on reviews of the evidence provided in comprehensive, state-of the-art texts edited by others, particularly Ward, Mattick and Hall (1998e), Strain and Stitzer (1999), and Lowinson, Payte, Salsitz, Joseph, Marion and Dole (1997). Although not all of the primary sources cited in these and other texts are mentioned in this document, readers are encouraged to consult these materials.

## **Section 2. Background**

### **2.1 What Is Substance Dependence?**

According to the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV)<sup>5</sup>, the key feature of substance dependence is "a cluster of cognitive, behavioural and physiological symptoms indicating that the individual continues use of the substance despite significant substance-related problems...a pattern of repeated self-administration that usually results in tolerance, withdrawal, and compulsive drug-taking behavior." Although tolerance and withdrawal are usual features of substance dependence, the DSM-IV notes that neither is necessary for a diagnosis of substance dependence (Brands and Brands, 1998, 42).

As Brands et al. (1998, 43-44) explain, the term "addiction" is no longer widespread in the medical community, and has been largely replaced by the term "drug [or substance] dependence." They also note that the term "drug [or substance] abuse" is: "a highly complex, value-laden and often excessively vague term that does not lend itself completely to any single definition." Furthermore, because the term has different meanings for different groups of people – and their definition of the term reflects their different perspectives – there is often difficulty in drawing a line between *use* of substances and *abuse* of substances (Brands et al., 1998, 45).

### **2.2 What Is Opioid Dependence?**

According to the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV), (reprinted with permission from the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition. Copyright 1994 American Psychiatric Association), opioid dependence is a substance dependence disorder. The DSM-IV specifies criteria for opioid dependence (which are the same as for substance dependence) and which include physical tolerance of, and dependence on, opioids, as well as the compulsive use of opioids despite harm:

"A maladaptive pattern of substance use, leading to clinically significant impairment or distress, as manifested by three (or more) of the following, occurring at any time in the same 12-month period:

1. tolerance, as defined by either of the following:
  - a) a need for markedly increased amounts of the substance to achieve intoxication or desired effect

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5 Reprinted with permission from the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition. Copyright 1994 American Psychiatric Association.

- b) markedly diminished effect with continued use of the same amount of the substance
- 2. withdrawal, as manifested by either of the following:
  - a) the characteristic withdrawal syndrome for the substance (refer to criteria A and B of the criteria sets for Withdrawal from the specific substances)
  - b) the same (or a closely related) substance is taken to relieve or avoid withdrawal symptoms
- 3. the substance is often taken in larger amounts or over a longer period than was intended.
- 4. there is a persistent desire or unsuccessful efforts to cut down or control substance use
- 5. a great deal of time is spent in activities necessary to obtain the substance (e.g., visiting multiple doctors or driving long distances), use the substance (e.g., chain-smoking), or recover from its effects
- 6. important social, occupational, or recreational activities are given up or reduced because of substance use
- 7. the substance use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance (e.g., current cocaine use despite recognition of cocaine-induced depression, or continued drinking despite recognition that an ulcer was made worse by alcohol consumption)..."

### **2.3 Impact of Opioid Dependence**

People who are dependent on opioids often lead extremely stressful and chaotic lives, and frequently experience serious health and social problems as a result of their dependence. They are at high risk for premature death from accidental drug overdose, drug-related accidents and violence. Sharing needles, syringes, straws, cookers or other contaminated drug-taking equipment, for example, places them at high risk of acquiring human immunodeficiency virus (HIV), hepatitis C virus (HCV) or other blood-borne pathogens. The problem of opioid dependence may be exacerbated by multiple substance use, as well as by factors such as poverty, and homelessness. Mental health disorders – such as depression, antisocial personality disorder and phobias – are common. Often, people who are dependent on opioids have experienced a long history of rejection, exclusion, and incarceration, which reinforces their sense of alienation and antagonism. They may have little sense of control over their lives.

Opioid dependence is a costly social problem. Researchers have estimated that there may be 40,000 to 90,000 people in Canada who regularly use heroin (Fischer and Rehm, 1997, 367). The majority of people who are dependent on opioids are injection drug users.<sup>6</sup> Untreated, opioid dependence involves costs related to criminal activity, medical care, drug treatment, lost productivity, and, increasingly, transmission of HIV, HCV and other blood-borne pathogens. In 1996, approximately half of the estimated 4,200 new HIV infections that occurred in Canada were among injection drug users (IDUs) (Health Canada, 1999b, 1).<sup>7</sup> According to the Laboratory Centre for Disease Control (as cited in Health Canada, 2000a, 6), at least 70% of prevalent HCV infections are related to injection drug use. Some populations of individuals who are dependent on opioids are particularly vulnerable to the dual problem of injection drug use and infection with HIV, HCV or other blood-borne pathogens including women, street youth, offenders in correctional facilities, and Aboriginal people (Canadian HIV/AIDS Legal Network, 1999, 11; Health Canada, 2000a, 15-20).

Research by Single et al. (as cited in Fischer and Rehm, 1997, 368) indicates that the costs related to injection drug use and opioid dependence are significant. Overall, illicit drug use cost an estimated \$1.37 billion in Canada in 1992, and about 70% of this (or \$48 per capita) was attributed to opiate use. The lifetime (i.e. over a 17-year period) costs of treating an individual with HIV infection are estimated at \$153,000 (Albert and Williams, 1998, 38).

## **2.4 What Is Methadone Maintenance Treatment?**

Although other forms of treatment for opioid dependence continue to be explored, in Canada and internationally, methadone maintenance treatment remains the most widely used form of treatment for people who are dependent on opioids. Methadone itself is a long-acting synthetic opioid agonist, which is prescribed as a treatment for opioid dependence. People who are dependent on opioids may be dependent on either oral or injectable forms of opioids such as heroin (diacetylmorphine),

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6 The documents reviewed for this report primarily focussed on injection of opioids – primarily heroin injecting. Some clients/patients who receive methadone maintenance treatment are dependent on opioids that are taken in other forms, e.g. opioids such as morphine or hydromorphone which are taken orally. Others may smoke or snort heroin. Although no estimate of the number of people who are dependent on opioids administered through non-injection routes was identified for this review, there is some information available regarding prescription opioid use: the 1996-97 National Population Health Survey found that 4.7% of Canadians aged 15 years or older reported using an opioid analgesic (codeine, Demerol ® or morphine) in the month preceeding the survey (Canadian Centre on Substance Abuse and Centre for Addiction and Mental Health, 1999, 117).

7 Injection drug users are at risk, regardless of the substance being injected. These figures include people who inject opioids and/or other drugs such as cocaine. According to research by Poulin et al. (as cited in Canadian HIV/AIDS Legal Network, 1999, 10), there are very high rates of injectable cocaine use in Vancouver, Toronto and Montreal.

morphine or hydromorphone. Methadone maintenance treatment is an appropriate form of treatment for opioid dependence, regardless of the route of administration (oral or injection).

There is no universal definition of what a methadone maintenance treatment "program" is, although the common basis is clearly the use of methadone. Program components and policies vary widely around the world, and within Canada. A comprehensive approach to methadone maintenance treatment, however, generally includes a number of components – which can be delivered in a variety of ways and at varying levels of intensity – including:

- methadone dose;
- medical care;
- treatment for other substance use;
- counselling and support;
- mental health services;
- health promotion, disease prevention and education;
- linkages with other community-based supports and services; and
- outreach and advocacy. (See Section 4.6: Integrated, Comprehensive Services).

## **2.5 How does Methadone Work?**

Methadone works by alleviating the symptoms of opioid withdrawal. A stable and sufficient blood level of methadone stems the chronic craving for opioids. Since methadone is a much longer acting drug than some other opioids, such as heroin, one oral dose daily prevents the onset of opioid withdrawal symptoms – including anxiety, restlessness, runny nose, tearing, nausea and vomiting – for 24 hours or longer.

Methadone diminishes the euphoric effects of other opioids (cross tolerance), without necessarily causing euphoria, sedation or analgesia (Lowinson et al.,1997, 407). This means self-administered illicit opioids will not lead to euphoria, making it less likely that clients/patients will either use illicit opioids or overdose.

Individuals in a methadone maintenance treatment program take their medication orally once daily – often it is mixed into an orange drink. Since methadone is long-acting, the need to inject other opioids is decreased and this reduces the health risks associated with injection drug use.

Tolerance to the effects of methadone develops very slowly, allowing many individuals who are dependent on opioids to be maintained on the same dose of methadone safely for many years.

When appropriately prescribed and dispensed, methadone is considered a medically safe medication.

For further information on the pharmacology and pharmacokinetics of methadone, readers are encouraged to consult the references cited in the back of this document.

## **2.6 Brief History of Methadone Maintenance Treatment**

Methadone was originally developed in Germany as a substitute analgesic for morphine. World War II brought the formula to the attention of North American researchers, who subsequently discovered that methadone could be used to treat heroin withdrawal symptoms. Although the work of American researchers, Dole and Nyswander, in the early 1960s is perhaps best known for demonstrating that methadone was suitable as a maintenance treatment, a Canadian researcher, Dr. Robert Halliday, set up what may have been the first methadone maintenance treatment program in the world in British Columbia in 1963 (Ruel, as cited in Health Canada, 1998, 3; Berger, Carlisle and Marsh, as cited in Ontario Ministry of Health, 1999, 6).

To date, methadone remains the only opioid authorized for long-term (more than 180 days) outpatient pharmacological treatment of people who are dependent on opioids in Canada (Health and Welfare Canada, 1992, 10). In the almost forty years since methadone was first used in Canada, the number of people receiving treatment has fluctuated, as the regulations surrounding methadone have changed. After national guidelines for prescribing methadone were first introduced in 1972, the number of people receiving treatment dropped from 1,700 in 1972 to only 600 in 1982 (Berger, Carlisle and Marsh, as cited in Ontario Ministry of Health, 1999, 5). Since then – as awareness and concern about opioid dependence and related public health risks, notably the increasing rate of infection with HIV, HCV and other blood-borne pathogens among injection drug users has grown – the number of people who are dependent on opioids who are receiving methadone maintenance treatment has increased.

## **2.7 Evolving Regulatory and Administrative Context**

The regulatory and administrative context within which methadone maintenance treatment in Canada is delivered continues to evolve. From the mid-1990s to the present, there have been significant changes in the administration of methadone maintenance treatment. The Office of Controlled Substances, Health Canada, permits physicians to prescribe methadone. In recent years, the provinces have begun to take over some responsibilities for administering methadone maintenance treatment programs. At this time, several provinces have developed – or are in the process of developing – guidelines and training for practitioners interested in providing methadone maintenance treatment.

## **2.8 Increasing Access to Methadone Maintenance Treatment in Canada: Overcoming Barriers**

Current efforts to increase access to methadone maintenance treatment are linked to continued concerns about the relatively low numbers of people who have access to methadone maintenance treatment in Canada, as compared to other countries, such as Australia, that have emphasized methadone maintenance treatment as a key strategy for public health.<sup>8</sup> Although in recent years, the number of clients/patients enrolled in methadone maintenance treatment has increased to approximately 15,000 (D. Marsh, personal communication, November 2000), critics of the situation in Canada still note that there are still barriers at every level – within society, in systems, in programs, and at the individual level – that need to be addressed.

To date, some of the signs of progress in overcoming barriers include:

- a growing awareness in the field that ongoing dialogue – at all levels – as well as a commitment to collaboration and coordination will be needed to overcome barriers and increase access to methadone maintenance treatment in Canada;
- an increased recognition among practitioners of the need for flexible and individualized services, driven by client/patient needs;
- an increasing emphasis in the field on the role of methadone maintenance treatment programs within a harm reduction<sup>9</sup> approach to opioid dependence (Fischer and Rehm, 1997, 369); and
- international recognition of methadone maintenance treatment – particularly low threshold approaches to treatment – as an important strategy to combat transmission of HIV – and to potentially help prevent and control the transmission of HCV and other blood-borne pathogens – among injection drug users.

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8 According to research reviewed by Fischer and Rehm (1997, 368), Canada has a rate of 111 methadone treatment spots per million people, a rate which is lower than Australia (1,020), Switzerland (2,000), Belgium (1,000), Germany (247) and the US (442). In mid-1996, there were about 3,250 people receiving methadone treatment in Canada.

9 There is no single definition of what the term “harm reduction” means. This document relies on the following description: “Harm reduction strategies seek to reduce the likelihood that drug users will contract or spread HIV infection, hepatitis C, and other infections, overdose on drugs of unknown potency or purity, or otherwise harm themselves or other members of the public. Such an approach attempts to reduce the specific harms associated with drug use without requiring abstinence from all drug use. Harm reduction strategies are based on a hierarchy of goals, and stress short-term, achievable, pragmatic objectives rather than long-term idealistic goals” (Nadelmann; Des Jarlais et al., Canadian Centre on Substance Abuse; Des Jarlais and Friedman, as cited in Canadian HIV/AIDS Legal Network, 1999, 43). Harm reduction is also described as a public health philosophy that “recognizes that a pragmatic, non-judgmental approach, especially in dealing with addictions, is a more effective way to minimize the harm done by drug use than a model that insists on abstinence as a prior condition of treatment.” (de Burger, as cited in Canadian HIV/AIDS Legal Network, 1999, 44).

Suggestions for increasing the accessibility of methadone maintenance treatment, particularly within programs and for specific groups of people, are included throughout this document.

| <b>Barriers</b>                                                                                                                          | <b>Potential Ways to Address Barriers</b>                                                                                                                        |
|------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Attitudinal barriers to treatment including fear and misinformation                                                                      | Expand educational efforts – including dissemination of information – among policy makers, practitioners, public and clients/patients                            |
| Philosophical differences among practitioners                                                                                            | Educate and provide opportunities for dialogue                                                                                                                   |
| Insufficient resources for treatment                                                                                                     | Increase resources and/or reallocate existing resources                                                                                                          |
| Lack of practitioners                                                                                                                    | Link educational strategies with recruitment initiatives<br>Explore incentives                                                                                   |
| Level of regulation                                                                                                                      | Ongoing dialogue and consultation with all jurisdictions to clarify roles                                                                                        |
| Uneven or fragmented access to services across jurisdictions and sectors and lack of transferability                                     | Ongoing interjurisdictional and intersectoral dialogue and information sharing to “cross-fertilize” knowledge and experience of best practices                   |
| Lack of access in rural or remote areas                                                                                                  | Increase access - see Section 7.7 - MMT and People Living in Rural and Remote Areas                                                                              |
| Lack of outreach                                                                                                                         | Increase outreach - see Section 4.6.7 - Outreach and Advocacy                                                                                                    |
| Program Policies (admission criteria, etc.)                                                                                              | Revisit program policies - see Section 5.0 - Best Practices in MMT - Program Policies                                                                            |
| Lack of supports for clients/patients (costs of treatment, access to and cost of transportation, access to and cost of child care, etc.) | Increase supports for all clients/patients including those with specific needs - see Section 7.0 - Best Practices in MMT - Meeting the Needs of Specific Groups. |
| Lack of supports for team members                                                                                                        | Increase supports for practitioners - see Section 6.0 - Best Practices in MMT - Program Team and Environment                                                     |

## **2.9 What Is the Status Quo - How Is Methadone Maintenance Treatment Delivered In Canada and Internationally?**

Around the world, methadone maintenance treatment is delivered in many different ways. In addition to differences in national regulatory frameworks, programs differ widely in terms of their philosophy, the extent of non-pharmacologic treatment services provided, their program policies, and program settings. Programs also serve different client/patient groups.

In some countries, efforts are being made to increase access to methadone maintenance treatment. In the United States, for example, attempts to increase access to methadone maintenance treatment have led to new approaches to program delivery, such as:

- “medical maintenance” (based in physicians’ offices);
- “limited service” programs (methadone alone, without comprehensive services);
- methadone clinics as primary-care sites (on-site access to primary health care services);
- residential short-stay methadone treatment;
- corrections-based programs;
- special primary medical care services for people living with HIV/AIDS;
- culturally sensitive, family-centred treatment; and
- programs that “frontload” services to newly admitted clients/patients (Lowinson et al., 1997, 412-413).

Other countries have also introduced a range of different program delivery approaches – well-known examples include strategies such as the mobile vans in the Netherlands and Boston (Lowinson et al., 1997, 413).

### **Methadone Maintenance Treatment in Canada**

In Canada, as in many other countries, there is a national level regulatory framework for methadone prescription. The Office of Controlled Substances, Health Canada, works with provincial/territorial governments and medical licensing bodies to facilitate increased access to methadone maintenance treatment. To date, several provinces have developed – or are in the process of developing – guidelines and training for practitioners interested in providing methadone maintenance treatment. Although provinces have become increasingly involved in delineating the conditions under which physicians are permitted to prescribe methadone, methadone can be prescribed only by physicians who have received an exemption under the Controlled Drugs and Substances Act.

There is a dearth of published information about the various types of programs available in Canada. A national survey of substance use treatment programs collected information on 870 programs (estimated to be about 70% of the programs available in Canada). A total of 38 programs reported that they provide methadone maintenance treatment, and about half of those report using a higher dose regimen (60-100 mg/day). The prevalence of, and perceived need for, such treatment varies across the country (Health Canada, 1999c, 1,17,20).<sup>10</sup> According to a recent national report, many methadone maintenance treatment programs in Canada adhere to an abstinence philosophy, and some do not offer comprehensive services such as primary health care, counseling or education. Furthermore, while some provinces have expanded their methadone programs and made them more accessible, other provinces do not have any methadone programs (Canadian HIV/AIDS Legal Network, 1999, 6,16).

The research for this document, including a search of the Canadian Centre on Substance Abuse Treatment database, suggests that methadone maintenance treatment programs are delivered in a range of different settings including:

- substance use treatment services/clinics (outpatient/inpatient);
- community-based health centres/clinics;
- private medical clinics;
- individual physicians' offices (linked with community-based pharmacies);
- hospital-based health clinics;
- HIV/AIDS services/clinics;
- mental health agencies/clinics; and
- correctional facilities.<sup>11</sup>

Those who are involved in treatment delivery include practitioners and service providers from many different disciplines and backgrounds including medicine, psychology, substance use treatment and rehabilitation, social work, mental health and others. Practitioners' roles in providing treatment tend to vary somewhat depending on a variety of factors including program setting, available resources and geographic location. There also appears to be a significant amount of diversity –

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10 The survey results indicate that methadone maintenance treatment is particularly prevalent in British Columbia. In addition, respondents from Newfoundland, PEI, and New Brunswick indicated a limited need for treatment for opioid dependence. Respondents from NWT and Yukon reported increases in opioid dependence and a need for new programs (Health Canada, 1999c, 20). Ontario and several other provinces are working to expand methadone maintenance treatment services and license and train physicians to provide treatment for people who have been stabilized on methadone (Brands et al., 2000).

11 The search of the Canadian Centre on Substance Abuse Treatment Database identified a range of methadone programs.

across jurisdictions and among programs – in terms of program philosophy, range of services provided, client/patient groups served, level of client/patient involvement, program policies, and program settings.

## **2.10 What Types of MMT Programs are Most Effective?**

At this time, as Bell (1998a, 161) points out, “despite an extensive research literature, there is no broad consensus on the role of methadone maintenance treatment, or on how treatment should be delivered. Even where there is firm empirical evidence, such as the importance of adequate methadone dose, treatment practices are often out of line with research evidence.” Some of the difficulties in developing consensus on the most effective treatment approaches relate to the diversity of treatment goals. Other problems stem from the fact that some types of programs have been extensively evaluated, while others have received less attention. Furthermore, the current constellation of different delivery strategies represent attempts to respond to specific needs or circumstances.

There is evidence, however, that suggests that there are some “cross-cutting” features or characteristics of programs that increase the likelihood of client/patient retention and enhance other outcomes. Retention is a particularly key outcome – if programs cannot recruit and retain clients/patients, the potential benefits of treatment will not be realized. Consequently, this manual focuses on key aspects of:

- program development and design;
- program policies;
- program team and environment; and
- tailoring of programs to meet the needs of specific groups of clients/patients.

### **Insights from the field**

- ☛ Practitioners (and clients/patients) need access to a database of all the programs available across the country.
- ☛ Different service delivery communities need ways to share their knowledge and experiences.
- ☛ It is important to clarify the treatment goals against which program effectiveness will be evaluated.
- ☛ There is a need for a continuum of program options, e.g. low threshold programs may serve as a “bridge” to programs with more comprehensive services.

## Best Practices in MMT

| Program Development and Design                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Program Policies                                                                                                                                                                                                                                                                                                                                                                        | Delivery Modes                                                                                                                                       | Program Staff and Environment                                                                                                                                                                                                                                                                                                                                                                                      | Meeting the needs of Specific Groups                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Research and Evaluation                                                                                |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Clear program philosophy and treatment goals</li> <li>• Focus on engagement and retention</li> <li>• Maintenance orientation</li> <li>• Client/patient-centred approach</li> <li>• Accessibility</li> <li>• Integrated comprehensive services               <ul style="list-style-type: none"> <li>– Medical care</li> <li>– Other substance use treatment</li> <li>– Counselling and support</li> <li>– Mental health services</li> </ul> </li> <li>– Health promotion, disease prevention and education</li> <li>– Linkages with other community-based services and supports</li> <li>– Outreach and advocacy</li> <li>• Client/patient involvement</li> <li>• Involvement of wider community</li> <li>• Adequate resources</li> </ul> | <ul style="list-style-type: none"> <li>• Open admission</li> <li>• timely assessment</li> <li>• Adequate individual dosage</li> <li>• Methadone dosage during pregnancy</li> <li>• Unlimited duration</li> <li>• Clear criteria for discharge</li> <li>• Non-punitive approach to other drug use during treatment</li> <li>• client/patient-centred management of withdrawal</li> </ul> | <ul style="list-style-type: none"> <li>• Continuum of program delivery to meet needs of different people at different stages of treatment</li> </ul> | <ul style="list-style-type: none"> <li>• Multidisciplinary program team</li> <li>• Adequate human resources</li> <li>• Competence, attitudes, behaviours</li> <li>• Relationships and support</li> <li>• Adequate ongoing training</li> <li>• Program environment</li> <li>• Organized structured approach</li> <li>• Safety</li> <li>• Flexible routines</li> <li>• Information collection and sharing</li> </ul> | <ul style="list-style-type: none"> <li>• People with multiple substance use disorders</li> <li>• People who are dependent on oral opioids</li> <li>• Women</li> <li>• Pregnant women</li> <li>• Infants</li> <li>• Youth</li> <li>• People who are homeless</li> <li>• People living in rural or remote communities</li> <li>• First Nations and Inuit</li> <li>• People living with HCV</li> <li>• People living with HIV/AIDS</li> <li>• People with mental health disorders</li> <li>• Offenders in correctional facilities</li> </ul> | <ul style="list-style-type: none"> <li>• Address research gaps</li> <li>• Evaluate programs</li> </ul> |

## 2.11 Developing a Continuum of MMT Program Delivery

Given the diversity of clients/patients' goals and needs, the availability of a continuum of different types of program delivery modes – from “limited service”<sup>12</sup> to much more intensive levels of services – may be the most important concern. There should be recognition that people who are dependent on opioids are a heterogeneous population with diverse reasons for entering (or not entering) treatment. They do not all have the same type or level of need for treatment. Finally, as in all types of treatment, most people's needs will change over time, as treatment progresses. The more flexible, innovative and collaborative are the responses of various treatment delivery communities – including physicians, substance use treatment providers, and others – the better.

### Insights from the field

- ☛ Increase the number of program options and expand the points of access.
- ☛ Increase the level of outreach, particularly for people who are homeless or who have concurrent mental health disorders.
- ☛ Make more low threshold programs available, and ensure they have linkages with more comprehensive programs.
- ☛ All hospitals should have the capacity (and trained staff) to provide MMT.
- ☛ All substance use treatment facilities should have policies and procedures in place to accept MMT clients/patients.
- ☛ Ensure community pharmacists are designated as members of the program team.
- ☛ Link substance use treatment and mental health treatment services.
- ☛ Recruit (and support ) more family physicians to obtain authorization to prescribe methadone and become involved in shared care with community based agencies and facilities.
- ☛ Encourage a multidisciplinary approach to program delivery.
- ☛ Involve trained nurse-practitioners in program delivery.
- ☛ Develop more community-based clinics in accessible locations.
- ☛ Rely on family physicians to provide ongoing care for stabilized clients/patients who have little need for intensive services (with linkages to other services when needed).
- ☛ Attending a physician's office, rather than a specialized clinic, may be less stigmatizing for clients/patients.
- ☛ Have prescribing physicians working in needle exchange centres.
- ☛ Explore international models, eg. automated dispensing.

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<sup>12</sup> Including “low threshold” programs which have limited entry criteria.

## **Section 3. Rationale**

Although there are some side effects associated with the use of methadone (see Section 5.3: Adequate Individualized Dosage) – as there can be with any medication – there are many good reasons to provide people who are dependent on opioids with access to methadone maintenance treatment.

### **3.1 Potential Benefits of Methadone Maintenance Treatment**

A review of the literature (Health Canada, 2002a) indicates that methadone maintenance treatment is effective in reducing:

- the use of other opioids;
- the use of other substances, e.g. cocaine;
- criminal activity;
- mortality;
- injection-related risk behaviours;
- other risk behaviours for transmission of HIV and STDs;
- transmission of HIV (and potentially the transmission of HCV and other blood-borne pathogens).<sup>13</sup>

Methadone maintenance treatment has also been found to improve:

- physical and mental health;
- social functioning;
- quality of life; and
- pregnancy outcomes.

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13 The effectiveness of MMT as a primary prevention strategy for preventing the transmission of HCV and other blood-borne pathogens requires further research. The National Consensus Development Panel on Effective Medical Treatment of Opiate Addiction (1998, 1940) found that MMT reduces the transmission of “many infections, including HIV and hepatitis B and C.” While acknowledging the potential for MMT to play a role in reducing transmission of the hepatitis C virus (HCV), Ward, Mattick and Hall (1998g, 68-69) argue that most people who present for MMT will have already been exposed to HCV, which reduces the likelihood that MMT can be an effective means of primary prevention for those individuals. The results of the consultation process for this project suggest that there may be differences in urban and rural settings. Individuals in rural areas may present for treatment before they have contracted HCV, a situation that may relate to either lower prevalence in those communities, or to higher use of oral opioids. In circumstances where individuals who present for treatment have not been exposed to HCV, and become abstinent from all substance use during treatment, MMT may be a key strategy for prevention (Novick, 2000, 440). As discussed later in this document, people who present for MMT should be evaluated for HCV infection, and should receive appropriate care, monitoring and support. Available treatment options should be considered as part of a comprehensive approach.

Methadone maintenance treatment is associated with increased retention in treatment. Consequently, methadone maintenance treatment has the potential to benefit, not only people receiving treatment, but also those who are involved in delivering treatment, as well as the wider community and society as a whole.

For people who are dependent on opioids, methadone maintenance treatment provides access to a stable supply of a legal, pharmaceutical grade medication. As a result, people receiving treatment achieve respite from the stress of maintaining a constant supply of illicit opioids often involving criminal activities and high risk sexual and injecting practices. Rather than experiencing a constant cycle of highs and lows – as the result of repeated injections of heroin, for example – their mood and functional state become stabilized (Dole, Nyswander and Kreek, as cited in National Institute on Drug Abuse, 1995, 4-9). Overall, research indicates that people receiving MMT will:

- spend less time using narcotics daily (McGlothlin and Anglin, as cited in NIDA, 1995, 4-8);
- reduce their use of illicitly obtained opioids (and continue this pattern as long as they stay in treatment) (Simpson and Sells; Hubbard et al.; Simpson and Sells; Ball and Ross, as cited in NIDA, 1995, 4-10, 4-12, 4-14);
- reduce their use of other substances including cocaine, marijuana and alcohol (Hubbard et al., as cited in NIDA, 1995, 4-15);
- spend less time dealing drugs (McGlothlin and Anglin, as cited in NIDA, 1995, 4-8);
- spend less time involved in criminal activities (McGlothlin and Anglin; Ball and Ross, as cited in NIDA, 1995, 4-8, 4-16, 4-17);
- spend less time incarcerated (McGlothlin and Anglin, as cited in NIDA, 1995, 4-8);
- have much lower death rates than individuals who are dependent on opioids and not receiving treatment (the death rate for those not receiving treatment is more than three times higher than for those engaged in treatment (National Consensus Development Panel on Effective Medical Treatment of Opiates, 1998, 1938);
- reduce injecting (Ball and Ross, as cited in NIDA, 1995, 4-22), and injection related risk behaviours (studies reviewed by Ward et al., 1998g, 67-68);
- reduce other risk behaviours for transmission of HIV and STDs (Wells, Calsyn and Clark, 1996, 519; Longshore et al., 1994, 754);
- reduce their risk of acquiring HIV infection (Metzger et al., as cited in NIDA, 1995, 4-19, 4-20);
- potentially reduce their risk of acquiring HCV (Novick, 2000, 440) or other blood-borne pathogens;

- improve their physical and mental health (Lowinson et al., 1997, 409; Dole, Nyswander and Kreek, as cited in NIDA, 1995, 4-9);
- improve their social functioning (Gearing and Schweitzer, as cited in Brands and Brands, 1998,2) and increase their likelihood of being employed full-time (Simpson and Sells, as cited in NIDA, 1995, 4-18); and
- improve their quality of life (Dazord, Mino, Page and Broers, 1998, 235).

For pregnant women who are dependent on opioids, receiving methadone maintenance treatment, combined with adequate prenatal care, decreases obstetrical and fetal complications (National Consensus Development Panel on Effective Medical Treatment of Opiate Addiction, 1998, 1939). Methadone protects the fetus from erratic opioid levels and frequent opioid withdrawal symptoms, which are common among pregnant women who do not receive treatment for their opioid dependence (Finnegan; Kaltenbach et al., as cited in NIDA, 1995, 1-32, 1-33).

Methadone maintenance treatment has substantially higher retention rates (68% after three months) compared to outpatient counselling without methadone (36%) or residential programs without methadone (45%) (Hubbard et al., as cited in Brands and Brands, 1998, 2).

The longer people who are dependent on opioids remain in MMT, the more likely they are to remain crime-free, to avoid injecting, and to reduce their use of heroin (Simpson and Sells; Ball and Ross, as cited in NIDA, 1995, 4-11, 4-14).

For practitioners involved in treatment delivery, methadone maintenance treatment is an opportunity to:

- provide an important component of medical and public health care;
- develop partnerships and linkages with other service providers and provide clients/patients with a range of services and supports;
- establish positive, supportive therapeutic relationships with – and learn from – people who are dependent on opioids;
- contribute to an educational and therapeutic process that can lead people who are dependent on opioids to gain a new perspective on themselves and their use of drugs, and make changes in their lives.

For the wider community, the potential benefits of methadone maintenance treatment include:

- reduced drug-related criminal activity;
- reduced prostitution; and
- reduced numbers of discarded used needles in the community.

For society as a whole, methadone maintenance treatment may result in:

- reduced crime; and
- improved public health.

### **3.2 Potential Cost Benefits of Methadone Maintenance Treatment**

#### **Cost benefits**

Given the costs of untreated opioid dependence (see Section 2.3 - Impacts of Opioid Dependence above), methadone maintenance treatment offers significant cost benefits to society, which are worth more than the costs of providing treatment. Studies by the National Institute on Drug Abuse (as cited in Health Canada, 1999a, 12-13) found:

- the annual costs of methadone maintenance treatment are much lower than the annual costs of either untreated heroin use, incarceration or drug-free treatment programs;
- criminal activities related to heroin use resulted in social costs that were four times higher than the cost of methadone maintenance treatment (Harwood et al., as cited in NIDA, 1995, 1-47);
- for every dollar spent on methadone maintenance treatment there is a savings to the community of between US \$4-\$13 (results of CALDATA study, as Stoller and Bigelow, 1999, 24).

Similar cost benefits are being identified in Canada. In Toronto, the average social cost of an untreated person who is dependent on illicit opioids has recently been estimated to be \$44,600 per year (Wall et al., 2000). According to an estimate from the Centre for Addiction and Mental Health in Toronto, methadone maintenance treatment can be provided for approximately \$6,000 per year (D. Marsh, personal communication, November 2000).

#### **Cost-effectiveness**

There is some evidence that, compared to other forms of treatment for opioid dependence, methadone maintenance treatment's high retention rates and lower delivery costs make it a more cost-effective form of treatment (Ward and Sutton, 1998, 117). In one study, the cost effectiveness of methadone maintenance, compared to other treatment modalities, yielded a benefit/cost ratio of 4.4:1 (Rufener et al., as cited in Lowinson et al., 1997, 410).

## **Section 4. Best Practices In MMT – Program Development and Design**

### **Best Practices in MMT – Program Development and Design**



#### **4.1 Clear Program Philosophy and Treatment Goals**

Program philosophy refers to the principles and goals on which treatment is based. A clear articulation of a program's philosophy is an important starting point for developing an effective, accessible methadone maintenance treatment program (Ball and Ross, as cited in Lowinson et al., 1997, 412).

Historically, the prevailing social concerns about drug use and related crime have been a powerful influence on the goals of methadone maintenance treatment programs, and delivery approaches.

In practice, however, society, programs, practitioners and clients/patients often have somewhat different, albeit inter-related, goals for treatment. Consequently, their definition of success may also be somewhat different, and goals may also change over time, as treatment progresses.

For policy makers, methadone maintenance treatment should achieve positive long term outcomes for society (e.g. reduced mortality and morbidity due to opioid dependence; reduced rates of crime; and reduced social and economic costs of opioid dependence). Practitioners may focus on more specific clinical benefits, such as decreased symptoms of opioid withdrawal, and/or reduced needle use over a specific time period. Individual clients/patients may measure success in somewhat different terms, such as reduced risk of infection with HIV, HCV or other blood-borne pathogens, improved family life, getting and maintaining a job, reduced risk of having children apprehended by child protection agencies, or the increased likelihood of remaining in treatment while incarcerated (if they start treatment before being sentenced), and so on.

Programs should examine and clarify their underlying assumptions – about substance use, about opioid dependence, and about the goals of treatment. The program philosophy should be made clear to clients/patients and all other members of the program team. The specific policies and procedures of the program should be consistent with the overall philosophy. The goals of the program should reflect and respect the goals and needs of the clients/patients (see Section 4.4 - A Client/Patient-Centred Approach).

#### **Insights from the field**

- ☛ Programs should respect and protect the dignity of clients/patients.
- ☛ Programs should empower clients/patients.
- ☛ Should be no “mixed messages” – e.g. all members of the program team should ascribe to a maintenance orientation.
- ☛ Clients/patients should be able to be honest about their reasons for entering, staying in or leaving treatment – rather than having to give “the right answers” in order to comply with arbitrary program requirements.

## **4.2 Focus on Engagement and Retention**

Engagement in treatment is critical – when the opportunity arises, programs should focus on engaging people who are dependent on opioids in treatment in as short a period of time as possible. (See also Section 4.5 - Accessibility and Section 4.6.7- Outreach and Advocacy).

There is a growing emphasis on the importance of meeting the needs of individual clients/patients (NIDA, 1995, 1-38). Linked to this is the recognition that retention in treatment is essential. If clients/patients don't remain in treatment, they have little opportunity to achieve any potential gains from treatment. Retention is also important over the long-term, given that length of time in treatment is positively associated with achieving other positive outcomes of treatment (Ball and Ross, as

cited in Lowinson et al., 1997, 410), and specifically, reduced use of other opioids and reduced criminal activity (Simpson; Simpson and Sells; Hubbard et al., Bell et al., as cited in Ward, Mattick and Hall, 1998b, 330).

### **4.3 A Maintenance Orientation**

As noted above, methadone maintenance programs should focus on reducing harm by retaining clients/patients in treatment. The evidence indicates that a long-term maintenance philosophy increases retention in treatment (Caplehorn et al., McGlothlin and Anglin, as cited in Ward et al., 1998b, 324).

Rather than emphasizing abstinence from all drugs – including eventual tapering from methadone – as the primary goal of treatment, methadone maintenance programs should focus instead on maintaining clients/patients on methadone for as long as they continue to benefit from treatment. While some clients/patients may aim to achieve reduced use of, or abstinence from, drug use, and some may wish to taper off methadone, these outcomes should not be the exclusive emphasis of programs or practitioners, particularly in the initial stages of treatment (Ball and Ross, as cited in Lowinson, et al., 1997, 407).

### **4.4 A Client/Patient-Centred Approach**

Research reviewed by the National Institute on Drug Abuse has shown that identifying and meeting the needs of clients/patients is associated with better treatment outcomes (NIDA, 1995, 1-38).

A broader definition of the term “client/patient-centred” may also include:

- accessibility (see Section 4.5 - Accessibility);
- outreach and proactive recruitment of clients/patients (see Section 4.6.7 - Outreach and Advocacy);
- recognizing and accepting that each person who is dependent on opioids who enters treatment does so with widely varying experiences, expectations and needs;
- recognizing the impact of marginalization and emphasizing empowerment
- respecting clients'/patients' dignity;
- respecting clients'/patients' choices, particularly concerning their treatment goals;
- encouraging and facilitating client/patient involvement in decision-making at the individual and program levels (see Section 4.7: Client/Patient Involvement);
- fostering a collaborative, relationship-building approach between clients/patients and program team members (see Section 6.4 - Relationship Building and Support);

- tailoring treatment to meet individual clients'/patients' needs – clients/patients should be consulted at all stages of treatment;
- respecting the unique contexts of clients'/patients' lives – their relationships, their families, their obligations and responsibilities – and recognizing and seeking to minimize the potential impact that treatment may have on clients'/patients' ability to care for their children or other dependents, earn a living, and maintain healthy relationships with friends and family (see Section 4.5 - Accessibility);
- focussing on being inclusive and meeting the needs of different groups of clients/patients. (See Section 7.0: Best Practices in MMT - Meeting the Needs of Specific Groups).

### **Insights from the field**

- ☞ Individualized treatment plans can be a good starting point for client/patient-centred care – a treatment plan can identify the level and extent of services needed, clarify the involvement of all team members, and dictate needed linkages with other services and supports.

## **4.5 Accessibility**

Many people who are dependent on opioids are highly marginalized by society. Their access to treatment is problematic due to numerous barriers – at the societal, system, program and individual level (See Section 2.8: Increasing Access to Methadone Maintenance Treatment: Overcoming Barriers). At the program development and design level, there are many considerations that could enhance accessibility to treatment for all clients/patients including:

- client/patient-centred program policies (see Section 5.0), e.g. ensuring clients/patients who present for treatment are assessed and, where appropriate, receive treatment as rapidly as possible<sup>14</sup>, and the waiting period should be as short as possible, within the realm of good practice;
- flexible hours of operation – facilities should be open at appropriate times, e.g. early morning hours for people who are employed, etc.;
- affordability<sup>15</sup> (of methadone, counselling, and/or travel to treatment) – the cost of accessing and remaining in treatment should be in accordance with clients'/patients' ability to pay;

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14 Rapid access to treatment is associated with retention in treatment (Bell et al., Woody et al., Maddux et al., as cited in Ward et al., 1998b, 326). (See also Section 5.1 Open Admission and Section 5.2 Timely Assessment.)

15 In the U.S., treatment fees have been found to have an adverse effect on retention (Maddux et al., as cited in NIDA, 1995, 1-39).

- availability of other practical forms of support, such as child care, bus passes, food, clothing, etc., will impact on how accessible treatment is for clients/patients;
- program location – programs can be operated in a variety of settings, but site selection should facilitate ready access and, ideally, there should be as many points of access as possible. Around the world, the range of potential locations may include hospitals, community-based clinics, social service agencies, physicians' offices, pharmacies, mobile dispensing units (e.g. vans), and correctional facilities, among others (see Section 2.9 What is the Status Quo - How is Methadone Maintenance Delivered in Canada?);
- program transferability – clients/patients should be able to move – within their community and outside of their communities – and still have access to treatment.

More information on enhancing accessibility for specific groups of clients/patients is provided in Section 7.0: Best Practices in MMT - Meeting the Needs of Specific Groups.

### **Insight from the field**

- ☛ Program acceptability to clients/patients should precede the issue of program accessibility.

## **4.6 Integrated Comprehensive Services**

People who are dependent on opioids may need access to a wide range of services and supports – in addition to methadone – in order to reduce their use of other opioids and improve their quality of life. Integrated, comprehensive services are associated with better treatment outcomes.<sup>16</sup>

Integrated, comprehensive services help provide continuity of care by effectively linking clients/patients to the individualized range of services and supports they need – recognizing that not all clients/patients will need the same level of services and supports. Programs should use a tailored approach in which the intensity of services and supports varies according to individual needs, choices, and treatment progress.

Comprehensive services are associated with improved treatment outcomes<sup>17</sup> – the greater the level and intensity of ancillary services, the better the treatment outcomes (Strain et al., as cited in Strain, 1999b, 1000)<sup>18</sup> Integrated, comprehensive services may be delivered in a variety of ways.

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16 According to research reviewed by NIDA (1995, 4-29) two of the program characteristics associated with treatment success are: "providing comprehensive services" and "integrating medical, counseling and administrative services."

## **“Integration”**

“Integration” may be needed at different levels, for example:

- across jurisdictions – an integrated system of methadone maintenance treatment would require interjurisdictional collaboration among various players;
- within communities – integrated methadone maintenance treatment may necessitate creating links between various practitioners and treatment venues, e.g. linkages between physicians in private practice and local or regional substance use treatment agencies, and facilitating linkages between methadone maintenance treatment programs and other services available in the community, e.g. through referral and information sharing mechanisms;
- within agencies or programs – methadone maintenance treatment programs may need to be integrated with other programs provided by a substance use treatment service – to reduce the isolation and “specialized” status of methadone maintenance treatment within the field of substance use treatment. In addition, the “core” aspects of methadone maintenance treatment – prescribing, dispensing, monitoring – may need to be integrated with a range of other services and supports (medical, counselling, administrative) within a single treatment setting.

## **“Comprehensive”**

“Comprehensive” services encompass a holistic approach to meeting clients’/patients’ needs by providing a full spectrum of available supports and services, either on-site or through effective referral and service delivery networks. There are different approaches that can be used to deliver comprehensive services – depending on the treatment setting and available resources – and often they will require a collaborative approach in which the input of a wide range of players is a key driver in program development and implementation (see Section 4.8 Involvement of Wider Community). Regardless of whether they are provided on-site or through strong linkages with other services, a comprehensive continuum of care includes the following key components:

- medical care (including appropriate evaluation, monitoring, care, treatment and support for a wide range of comorbid medical conditions, including infection with HIV, HCV or other blood-borne pathogens);
- other substance use treatment;
- counselling and support;

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17 This does not mean that limited service programs are ineffective.

18 According to NIDA (1995, 1-43, citing McLellan et al.): “At 24 weeks, methadone alone resulted in minimal improvements; methadone plus counselling resulted in significant improvements over methadone alone; and enhanced methadone services, including a broad range of psychosocial services plus methadone, had the best outcomes of all.”

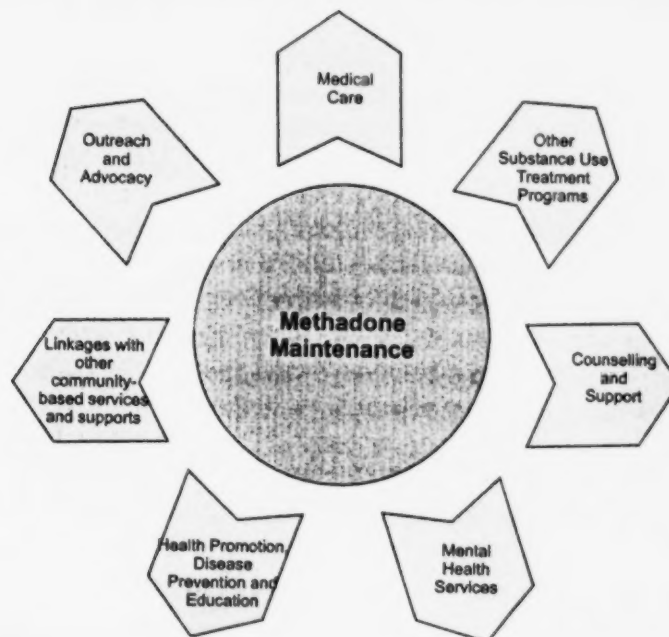
- mental health services;
- health promotion, disease prevention and education;
- other community-based services and supports, such as social services; child, youth and family services; legal/justice system services; education; employment and other community-based resources; and
- outreach and advocacy services.

Those who may be involved in providing a comprehensive approach include a wide range of practitioners from many different disciplines (see Section 6.1 - Multidisciplinary Program Team). The specific roles of each team member will vary according to factors such as level and type of professional training and expertise, as well as differences in program design and delivery. Depending on program type, location, available resources, and other factors, professionals may play a variety of different roles.

### **Insights from the field**

- ☞ Continuity of care is a key issue, e.g. hospital staff need to know how to deal with people who enter hospital and who need to keep taking methadone while they detoxify from other drugs or receive other treatment.
- ☞ Emergency physicians need to be familiar with methadone maintenance treatment.
- ☞ Professionals need to know that appropriate pain management for individuals receiving methadone maintenance treatment is important.
- ☞ Referral system has to be effective, otherwise clients/patients will “fall through cracks.”

## Key Components of a Comprehensive approach to MMT



### 4.6.1 Medical Care

People who are dependent on opioids often have co-morbid medical conditions and unmet needs for medical treatment. Some of the many medical conditions that clients/patients should be assessed for include:

- skin and soft tissue infections from non-sterile injection techniques;
- cardiac complications such as endocarditis;
- infection with HIV, HCV or other blood-borne pathogens;
- pulmonary, renal, immunologic or neurologic complications;
- health consequences of domestic violence;
- nasal septum perforation; or
- chronic or severe pain.<sup>19</sup>

Some conditions may require specialized medical care. For example, appropriate evaluation, monitoring, care, treatment and support for individuals who have acquired HIV, HCV or other blood-borne pathogens is a key component of medical care.

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19 For more information about comorbid medical conditions, please see Fingerhood (1999).

Providing adequate medical care for clients/patients includes appropriate use of medications that may interact with methadone.<sup>20</sup>

More information on the medical needs of specific groups is provided in Section 7.0: Best Practices in MMT - Meeting the Needs of Specific Groups.

#### **Insights from the field**

- ☛ Clients/patients may not have family physicians and may seek medical assistance from emergency rooms, which are not equipped to provide appropriate care.
- ☛ Methadone maintenance programs should be integrated into a comprehensive health care system, rather than compartmentalized.
- ☛ Referrals should be to practitioners who are experienced in treating people dependent on opioids with other medical needs.

#### **4.6.2 Other Substance Use Treatment Programs**

People who are dependent on opioids may also be dependent on other substances. Access to effective substance use treatment programs (in addition to methadone maintenance treatment) is essential. Methadone maintenance treatment programs need to be linked with other substance use treatment programs that employ recognized best practices.<sup>21</sup>

#### **Insight from the field**

- ☛ Increase physicians' training in addiction medicine.

#### **4.6.3 Counselling and Support**

There is evidence that providing counselling adds to the effectiveness of methadone maintenance treatment programs.<sup>22</sup> In the field, the term "counselling" encompasses a wide range of activities which may include, among others:

- crisis intervention;

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20 Readers are encouraged to consult Brands and Janecek (2000) for a detailed chapter on drug interactions. They (Brands and Janecek, 2000, 99) note that: "The risk of interactions need not preclude the use of any medications that can interact with methadone, except those that are contraindicated. However, patients must be monitored more closely and doses may have to be adjusted as appropriate." See also Gourevitch and Friedland (2000) for a detailed article on interactions between methadone and medications used to treat HIV infections.

21 For comprehensive information about effective substance use treatment approaches, see Health Canada (1999a).

- case management, including referrals to and liaison with other agencies;
- individual, one-on-one counselling;
- group counselling;
- couples or family counselling;
- vocational counselling;
- substance use counselling;
- pre- and post-test HIV counselling, and counselling related to other medical conditions;
- health and other education programs;
- brief, supportive contacts; and
- long term intensive support.<sup>23</sup>

When they are ready to do so, clients/patients should have access to evidence-based approaches to counselling to address issues of concern to them.

#### **Insight from the field**

☞ Counselling should be as-needed, rather than mandatory.

#### **4.6.4 Mental Health Services**

When necessary, clients/patients should have access to mental health services. For more detailed information about the needs of clients/patients who have concurrent mental health disorders, see Section 7.11: MMT and People with Mental Health Disorders.

#### **4.6.5 Health Promotion, Disease Prevention and Education**

Methadone maintenance treatment programs are an important tool for reducing the risk of transmission of HIV, and potentially, the risk of transmission of HCV and other blood-borne pathogens, by reducing injection drug use. Programs are also an opportunity to provide other prevention measures – including screening, counselling, information and education on transmission of HIV, HCV and other blood-borne pathogens, and prevention initiatives related to sexually transmitted

22 According to a study by McLellan et al. (as described in NIDA, 1995, 4-30), patients were assigned to three types treatment programs: methadone with no counselling; methadone plus counselling; and methadone plus counselling and other psychosocial treatment. The patients receiving the most comprehensive services had the highest rate of negative urine toxicology screens for opioids after 24 weeks.

23 For a discussion of counselling, please see Mattick, Ward and Hall (1998).

diseases. Other aspects of a health promotion approach, including nutrition and wellness programming, should also be integrated into methadone maintenance treatment programs.

#### **4.6.6 Linkages with Other Community-Based Services and Supports**

Methadone maintenance programs should either offer – or be directly linked to – a variety of other services and supports that a client/patient may need. These other or “ancillary”<sup>24</sup> services include those services that are not typically provided by health care professionals or programs – and are sometimes not provided by substance use treatment programs either. They include, for example:

- social services (welfare, housing, transportation, child care, training);
- child, youth and family services (child welfare, child care, youth services, parenting supports);
- legal/justice assistance (victims’ services, police, parole, probation, legal assistance, Crown Attorneys, corrections, offenders support groups such as Elizabeth Fry, John Howard Society, etc.);
- educational programs (literacy, academic upgrading);
- employment programs (vocational skills/training, employment services and programs, employee assistance programs);
- other community resources such as needle exchanges, shelters, food banks, spiritual organizations, ethnocultural organizations, Friendship Centres, recreational services, community advisory groups.

To create effective linkages with other community resources, programs should establish relationships and communications mechanisms with a range of other agencies and facilities in the community. (See also Section 4.8: Involvement of the Wider Community.)

Establishing these linkages is a critical aspect of ensuring continuity of care for clients/patients. They can prevent clients/patients from “slipping through the cracks”.

#### **Insight from the field**

- ☛ Physicians need to have a list of the community resources available.

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24 Definitions of ancillary services vary depending on the research study, but Ward et al. (1998b, 324) use the term to refer to “services provided by methadone maintenance programs other than the dispensing of methadone,” such as medical treatment, counselling and job training. In this document, medical services and counselling are discussed separately.

#### **4.6.7 Outreach and Advocacy**

Outreach is a particularly important aspect of methadone maintenance treatment, given the level of marginalization experienced by many people who are dependent on opioids. In order to increase access to treatment, programs should consider proactive measures to reach out to potential clients/patients who are not likely to access treatment without encouragement and support. Outreach is an area in which peer-based strategies and linkages and partnerships with agencies working at the front-line or “street” level are particularly important.

Advocacy is another key area. The role of a client/patient advocate includes providing clients/patients with information about the program and their rights and responsibilities, as well as intervening on clients'/patients' behalf to help access services and supports. (See also Section 4.7: Client/Patient Involvement and Section 6.10: Information Collection and Sharing).

#### **Insights from the field**

- ☛ Street workers can do outreach to bring people who are unlikely to access either medical services or substance use treatment facilities into low threshold programs.
- ☛ Give people good information about what to expect – they need to know that, even if they have tried MMT in the past, they can and should try again. They should know that relapse may have been linked to the program, rather than to their personal failure. They need to know there are options.

#### **4.7 Client/Patient Involvement**

Client/patient input is a key component of program development and implementation. Programs need to value, seek out, encourage and support client/patient involvement. Some of the many different mechanisms for soliciting and supporting client/patient input include:

- client/patient participation on community advisory boards;
- client/patient participation on decision-making bodies such as steering committees;
- client/patient involvement in hiring the program team and evaluating the program;
- feedback mechanisms for clients/patients, such as suggestion boxes, surveys and focus groups;
- outreach programming;
- providing peer counselling and support (e.g. information about client/patient rights, literacy, meals);
- clients/patients becoming trained counsellors;

- clients/patients serving as advocates who can:
  - provide information for other clients/patients about the program and their rights and responsibilities;
  - help other clients/patients access needed services and supports (case management);
  - offer or refer clients/patients to peer-based mutual support groups; and
  - provide outreach.

### **Insights from the field**

- ☛ Strategies and mechanisms that have been used to facilitate client/patient involvement in the areas of HIV/AIDS and breast cancer offer good models.
- ☛ There is a need for support for peer-based advocacy groups (at local, provincial, national levels).
- ☛ Peer-based groups can provide services – a portion of treatment funding could be allocated to these groups to provide socialization (a place to go), advocacy, education, job-finding services, etc.
- ☛ A client/patient advocate should have a title and a telephone, and should, ideally, be a paralegal.
- ☛ Programs should make space available for clients/patients to meet with each other.

## **4.8 Involvement of Wider Community**

Community involvement in program development, design and implementation is often a key factor in providing integrated, comprehensive services. Mechanisms such as community advisory boards can broaden the sense of community ownership. These boards can play a number of valuable roles such as:

- identifying needs for program delivery (current and future);
- facilitating consultation, information sharing and communication with the general public re: need for the program, the goals of the program, how it works, and its potential benefits;
- addressing the public's concerns and fears;
- providing opportunities for community members to learn about and support the program;
- liaising with the media;
- advocating with policy makers and funding bodies for better services for clients/patients;
- recruiting of practitioners;

- creating opportunities for community partners to discuss issues and resolve problems;
- fostering broad-based approaches to treatment delivery, including developing working referral networks, and enhancing coordination and facilitation;
- developing inter-agency protocols, agreements and service contracts;
- fund raising;
- providing training for community partners;
- seeking employment opportunities and other resources for clients/patients; and
- serving as a community feedback mechanism.

Examples of those who could become involved include:

- members of the community at large;
- clients/patients;
- specific community players including police, businesses, agencies, shelters, spiritual and cultural organizations, service groups, educational facilities, municipalities, etc.

### **Insights from the field**

- ☛ Advisory groups should be operating at the community, as well as at the provincial level.
- ☛ Advisory groups may benefit from an educational component, e.g. workshops, MMT Q and A, etc.
- ☛ partnerships are not without challenges – there is a need to overcome philosophical differences.
- ☛ Advisory groups need the right players involved, i.e. people who will share what they learn with their colleagues and peers.
- ☛ Clients/patients need support to become involved – they need to know that their voices will be heard.

## **4.9 Adequate Resources**

Increasing access to methadone maintenance treatment requires adequate resources. The costs of delivering programs depends on the mode of program delivery and considerations such as whether or not all program services are delivered in-house or on-site, or the extent to which there are linkages with other services available in the community. Those involved in the development and design of programs should consider the following questions:

- What is the extent of opioid dependence in the community and what type of programming is needed?
- What is the current allocation of resources to existing substance use programming, and is there a potential need to shift priorities and re-allocate resources to MMT programming?
- What are the potential savings to be gained from MMT programs (and what are the best ways to re-invest those savings)?
- What are the most cost-effective strategies to deliver programs?

### **Insights from the field**

- ☛ There could be sharing of in-kind services between agencies.
- ☛ There could be sharing of counselling services between agencies.
- ☛ It may be helpful to provide in-house multidisciplinary training.
- ☛ It may be helpful to develop cross-sectoral training, e.g. of mental health and substance use treatment providers.
- ☛ It may be useful to promote the secondment of substance use treatment providers into mental health services, and vice versa.

## Potential Partners in a Comprehensive Approach to MMT

| Methadone Maintenance                                                                                                                                                                                                                                                  |                                                                                                                                                                                |                                                                                                                                            |                                                                                                                                    |                                                                                                                                                                          |                                                                                                                                                                |                                                                                                                                            |                                                                                                                                                                                           |                                                                                                                                                              |                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                |                                                                                                |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| Medical                                                                                                                                                                                                                                                                | Other Substance Use Treatment                                                                                                                                                  | Counselling and Support                                                                                                                    | Mental Health                                                                                                                      | Health Promotion, Disease Prevention and Education                                                                                                                       | Social Services                                                                                                                                                | Child, Youth, Family Services                                                                                                              | Legal/ Justice                                                                                                                                                                            | Education                                                                                                                                                    | Employment                                                                                                                                        | Resources                                                                                                                                                                                                                                                                                                                      | Outreach & Advocacy                                                                            |
| <ul style="list-style-type: none"><li>• hospital services</li><li>• emergency rooms</li><li>• primary care</li><li>• pain management</li><li>• HCV treatment</li><li>• obstetrics</li><li>• specialist care</li><li>• pharmacy dispensing</li><li>• lab work</li></ul> | <ul style="list-style-type: none"><li>• withdrawal management (detox)</li><li>• outpatient/patient residential</li><li>• mutual support</li><li>• advocate/ombudsman</li></ul> | <ul style="list-style-type: none"><li>• individual</li><li>• group</li><li>• women's/survivors</li><li>• couple</li><li>• family</li></ul> | <ul style="list-style-type: none"><li>• psychiatrists</li><li>• psychologists</li><li>• community mental health programs</li></ul> | <ul style="list-style-type: none"><li>• public health</li><li>• community health centres</li><li>• nutrition</li><li>• HIV prevention</li><li>• HCV prevention</li></ul> | <ul style="list-style-type: none"><li>• social assistance</li><li>• housing</li><li>• transportation</li><li>• child care support</li><li>• training</li></ul> | <ul style="list-style-type: none"><li>• child welfare</li><li>• child care</li><li>• youth services</li><li>• parenting supports</li></ul> | <ul style="list-style-type: none"><li>• victims' services</li><li>• police</li><li>• parole</li><li>• probation</li><li>• legal services</li><li>• Courts</li><li>• corrections</li></ul> | <ul style="list-style-type: none"><li>• literacy</li><li>• academic programs</li><li>• life skills</li><li>• professional</li><li>• general public</li></ul> | <ul style="list-style-type: none"><li>• vocational skills/training</li><li>• employment services/programs</li><li>• employee assistance</li></ul> | <ul style="list-style-type: none"><li>• needs exchange</li><li>• shelters</li><li>• food banks</li><li>• spiritual/ethno-cultural organizations</li><li>• recreational</li><li>• community advisory groups</li><li>• service groups</li><li>• private sector</li><li>• women's services</li><li>• friendship centres</li></ul> | <ul style="list-style-type: none"><li>• street workers</li><li>• peer-based services</li></ul> |

## **Section 5. Best Practices in MMT – Program Policies**

Clear program policies are associated with longer retention in treatment (Ball and Ross, as cited in Lowinson et al., 1997, 412). Program rules should be clearly communicated to clients/patients and consistently applied. Program policies – and the underlying “messages” they convey – should be consistent with a maintenance orientation, and they should promote a client/patient-centred, barrier-reducing, harm reduction approach to providing treatment. The following sections identify important considerations for some of the key treatment policy areas including:

- open admission;
- timely assessment;
- adequate, individualized dosage;
- methadone dosage during pregnancy;
- unlimited duration of treatment;
- clear discharge criteria;
- non-punitive approach to drug use during treatment; and
- client/patient-centred management of tapering.

### **5.1 Open Admission**

Given the many potential benefits of methadone maintenance treatment – and the individual dangers and social costs of not providing treatment<sup>25</sup> – program policies should encourage and facilitate admission to treatment. Admission criteria should be as open as possible, given available resources, and should ensure timely access to methadone maintenance treatment. Ideally, everyone for whom the individual and social benefits associated with treating opioid dependence are likely to be achieved by entry to treatment should be eligible for admission.

Programs should establish that an individual is physically dependent on opioids before they enter methadone maintenance treatment. For example, in Canada, methadone maintenance treatment is generally accepted to be an effective treatment for individuals who meet the criteria for opioid dependence, according to the DSM-IV. There are additional varying treatment criteria – such as varying age restrictions – among different jurisdictions and programs in Canada.

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25 According to a study by Bell et al. (as cited in Ward, Mattick and Hall al., 1998a, 193) , the main consequences for individuals not admitted to treatment were a delay of 16 months in their entry into treatment, and their exposure in the interim to the risk of imprisonment and death.

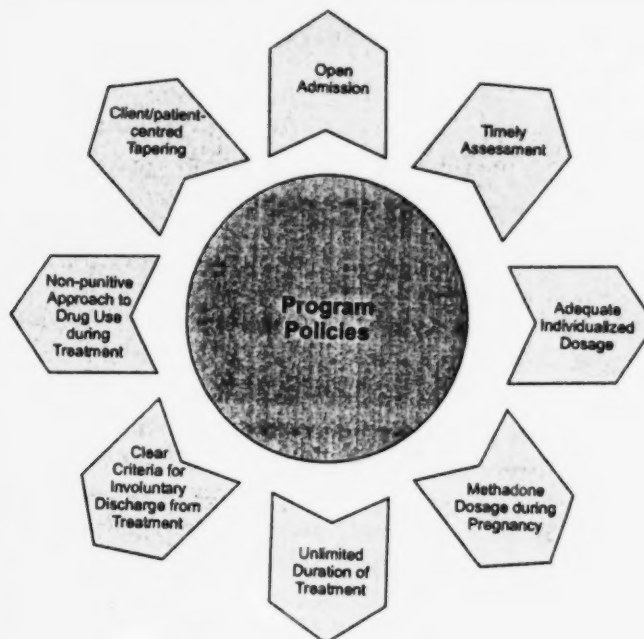
## Informed Consent

In keeping with standard ethical medical practice, before they enter a methadone maintenance program, clients/patients should be informed of other treatment options that are available to them. They should also be informed of the consequences – and the potential risks – of entering methadone maintenance treatment and practitioners should ensure that clients/patients understand fully what those consequences and risks are. Programs should also provide clients/patients with clear information about the specific program they are entering.

### Insights from the field

- ☛ Pregnant women who are dependent on opioids should have priority access.
- ☛ Clients/patients who are being transferred from one program to another should be assessed in a timely manner.
- ☛ Clients/patients should be given written material about MMT and the program.
- ☛ A treatment contract may be useful, but the timing should be sensitive to clients/patients needs – they may be entering treatment while in severe physical discomfort or crisis.

## Best Practices in MMT – Program Policies



## **5.2 Timely Assessment**

Assessment is part of the initiation of treatment as well as an ongoing process throughout all stages of treatment, i.e. intake-assessment, stabilization on methadone, maintenance on methadone, and after methadone is discontinued (if appropriate).

The first contact with a treatment agency has been shown to be a strong influence on defining the subsequent therapeutic relationship (Bell et al., Kauffman and Woody; Langrod; Miller and Rollnick; Woody et al., as cited in Ward et al., 1998a, 196). The initial assessment is, therefore, a good opportunity to establish a good working relationship with clients/patients and to establish what their goal and needs are. Subsequent stages of assessment should help strengthen the relationship between clients/patients and members of the program team.

Assessment is also an opportunity to provide clients/patients with information about methadone maintenance treatment, and about the program itself. Program policies and expectations should be described clearly. Clients/patients should be given as much information as possible, to allow them to make informed decisions about whether or not to enter, or continue in, treatment, and what level of services to access. The assessment process is also an opportunity to help motivate clients/patients to change and to improve their receptivity to treatment. A positive assessment experience sets the stage for a positive therapeutic relationship.

### **Immediate Crisis Management**

The initial assessment process is often preceded by a need for immediate crisis management.

Some clients/patients will be dealing with crisis situations when they present for treatment. Programs should be equipped to deal with emergency or life-threatening situations and should be set up to address clients'/patients' immediate needs for safe shelter, food, clothing or other services and supports.

### **Initial Assessment**

Although there is some debate about the amount of assessment that should be required prior to a client/patient receiving their first dose of methadone, the evidence indicates that rapid access to treatment is associated with achieving retention (Bell et al.; Woody et al.; Maddux et al., as cited in Ward et al., 1998b, 326). Consequently, the initial assessment should facilitate *timely access* to methadone medication. Once a diagnosis of opioid dependence is made, and the suitability of the individual for treatment is determined, clients/patients should receive their first dose of methadone as soon as possible. Beyond the initial assessment, a more comprehensive assessment can be done at a later stage to

establish treatment goals and facilitate linkages to other services that may be needed (see Comprehensive Assessment below, and Section 4.6: Integrated Comprehensive Services.)

The initial assessment should include:

- a physical examination;
- taking of vital signs;
- ordering initial lab tests such as HCV and liver-function tests;<sup>26</sup>
- a urine toxicology screen (one urine toxicology screen positive for opioids is useful in generating laboratory evidence to help confirm the diagnosis of opioid dependence; and is also helpful in determining if the client/patient has already ingested methadone, either by being enrolled in another program or by buying it off the street);
- assessment of the history/pattern of opioid and other substance use, including previous treatment episodes; and
- a pregnancy test for women.

### **Insights from the field**

- ☞ When a urine toxicology screen is not possible, documented evidence of opioid dependence (e.g. previous treatment, legal documentation) can be the basis for admission.
- ☞ HCV testing should be done at the same time as the initial blood work.

### **Comprehensive Assessment**

Once a person has entered a methadone maintenance treatment program – and when it is appropriate for the client/patient – a *comprehensive assessment* of all relevant medical, social and mental health factors should be conducted. Programs should rely on validated and reliable assessment tools and techniques to identify and address clients/patients' treatment goals, and their needs.

In addition to a medical assessment for the DSM-IV diagnosis of opioid dependence (Brands and Brands, 1998, 29), a comprehensive assessment process should include:

- physical examination, taking vital signs (Glezen and Lowery, 1999, 236), and ordering laboratory tests such as HCV and liver-function tests;

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26 In some programs, liver function tests are also done monthly for all those who test positive for hepatitis C so that referrals to a specialist can be made quickly if there is a problem.

- medical assessment by a physician or nurse-practitioner (Glezen and Lowery, 1999, 236), including taking a history of infections (e.g. HIV, HCV, tuberculosis) and other drug-related medical problems to determine extent of physical harm resulting from drug use;
- assessment of the history/pattern of opioid and other substance use (Stitzer and Chutuape, 1999);
- determining the extent of social life disruption (through questions about involvement in crime, prostitution, loss of employment, broken relationships and loss of housing);
- questions about past and current involvement in high-risk behaviours, i.e. for the transmission of STDs, and for the transmission of HIV, HCV and other blood-borne pathogens;
- assessment of the extent to which drug use and related problems have led to anxiety, depression (Ward et al., 1998a, 191), and suicidality;
- urine testing (Glezen and Lowery, 1999, 236);
- breath screening test for recent alcohol use (Glezen and Lowery, 1999, 236);
- a meeting with counsellors to prepare...for methadone treatment (Glezen and Lowery, 1999, 236);
- assessment of stage of, and motivation to change.

Information from the comprehensive assessment should be used to identify and make diagnoses, evaluate a client's/patient's need for services, and develop a comprehensive treatment plan (see Section 4.6: Integrated Comprehensive Services).

### **Ongoing Assessment**

In order to be an effective therapeutic tool, *assessment* should be *ongoing* throughout treatment. For example, once a treatment plan has been developed, it should be revisited and revised as needed, especially at key decision points. It can be helpful, in working with clients/patients, to track progress toward specific personal and program goals over time.

Many clients/patients will be involved in methadone maintenance treatment for an extended duration. For clients/patients who taper from methadone, however, no longer taking methadone does not necessarily mean the end of all treatment. Ongoing assessment can help identify and address the need for other interventions, and determine further progress toward treatment goals. If clients/patients consent to, and are available to participate in, long-term follow-up assessments, the information obtained can be useful for research and evaluation purposes – both to increase knowledge about methadone maintenance treatment, and to improve program delivery.

The assessment process should also take into account the needs of specific groups of clients/patients. (See Section 7.0 - Best Practices in MMT - Meeting the Needs of Specific Groups).

### **Insights from the field**

- ☛ Consider client's goals, not just those of the program.
- ☛ Create resource rooms containing food and clothing items .
- ☛ Use a partnership approach – some physicians administer the Addiction Severity Index and the Opiate Treatment Index themselves, while others may work with trained personnel, or partner with substance use counsellors.
- ☛ Balance assessment (i.e. information gathering) with provision of information to clients/patients.
- ☛ Assessment can be seen as either intrusive – some clients/patients have been through many prior assessments – or threatening, e.g. some clients/patients fear child protection services will automatically be called in.
- ☛ Clients/patients entering treatment may be in crisis and/or feeling very ill – the admission and assessment process should be as sensitive and timely as possible – an overly extensive assessment process can produce fatigue and frustration and encourage clients/patients to try to “say the right thing to get through it”.

### **5.3 Adequate Individualized Dosage ”**

Given that individuals vary in how they respond to doses of methadone, programs should have a flexible, individualized policy on dosage. Each individual needs to be carefully assessed by a clinician who is experienced with treating opioid dependence, and the initial dose should be assessed on an individualized basis. Client/patient input should be taken into account in determining the dosage.

Extra care should be taken in dosing people who have severe liver dysfunction, cardio-respiratory dysfunction or who are pregnant. Specific considerations for methadone dosage during pregnancy are discussed in Section 7.4: MMT and Pregnant Women.

Clients/patients should be advised to store methadone safely out of the reach of children.

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27 Please note: Practitioners who wish to prescribe methadone will require more detailed information than is provided in this section, e.g. information on topics such as initial starting dosage, methadone half-life, time to peak plasma level, dosage increase in first week, dosage range, lethal dosage, dosage increases over time, monitoring dosage level, overdoses, side effects, drug interactions and other safety issues. This information can be obtained by consulting existing federal guidelines (Health and Welfare Canada, 1992), or provincial guidelines where these exist. Additional resources include Brands and Brands (1998), Brands and Janecsek (2000), and Brands, Kahan, Selby and Wilson (2000).

## **Initial dose**

Clients/patients should be informed that the first or "initial" dose will be relatively low (10-30 mg), due to medical risk of overdose (Payte, 2000, 113-114). The initial dose represents a "balancing act" for physicians – they must balance the risk – if the initial methadone dose is too low – of clients/patients either leaving treatment or using other substances and risking overdose, against the risk of death if the starting dose of methadone is too high.

## **Dosage adjustment**

Dose adjustments should take place in phases, and should be done slowly to avoid problems created by rapid increases. In the "induction" phase, the dose is increased to a safe, adequate level to relieve withdrawal symptoms and cravings. The dose may then be further increased (or decreased) to achieve other desired effects.

Since methadone accumulates in the body over successive doses, the effects of the drug can increase over time even if the dose is not increased.

## **Common side effects**

Methadone may cause some side effects in the early stages of treatment including increased sweating, constipation, libido abnormalities, orgasm abnormalities, insomnia, appetite abnormalities, nausea, drowsiness, anxiety, headaches, body aches and pains and chills. These side effects, however, tend to largely disappear with long-term, high-dose methadone maintenance treatment (Kreek; Jaffe and Martin; Hartel; Hartel, as cited in NIDA, 1995, 1-37).

## **Maintenance on an adequate dosage**

Once someone is receiving an adequate, stable dose of methadone, they are not impaired. They can be "maintained" on methadone indefinitely. Some people stay on the same dose of methadone for many years.<sup>28</sup>

There is an ongoing debate about the level of methadone dose that should be used in treatment. The evidence supports the need for an "adequate" individualized dose of methadone to increase retention.<sup>29</sup> Higher doses of methadone have been associated with greater decreases in other opioid use and enhanced treatment retention (Strain; Stitzer et al., Caplehorn and Bell, as cited in Brands et al., 2000, 236). Some people may require significantly higher doses than others (Strain et al.,

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28 According to Hartel; Hartel; and Kreek (as cited in NIDA, 1995, 1-36) high doses of methadone prescribed over long periods of time did not have a toxic effect, and resulted in only minimal side effects among adults who were maintained in treatment for up to 14 years, and for adolescents treated for up to 5 years.

29 Adequate dose is an influential factor in client/patient retention, according to research by Ball and Ross (as cited in Lowinson et al., 1997, 412).

as cited in Leavitt, Shinderman, Maxwell, Chin and Paris, 2000, 408). The key aspect in determining dose, according to Brands et al. (2000, 236) is to provide an "optimal dose", i.e. one that "relieves withdrawal symptoms and drug cravings without sedation or other side-effects."

In its 1995 review of the evidence, the National Institute on Drug Abuse (1-39 to 1-40) concluded that: "The specific dosage for a patient cannot be arbitrarily determined since patients metabolize methadone at different rates. In addition, the appropriate dosage may change over time or in response to specific situations such as pregnancy or the use of other medications. Overall, methadone dosage should be based on the patient's individual needs, the goals of treatment, and the progress in treatment."

### **Dispensing**

There are many specific considerations related to the dispensing of methadone, and pharmacists – particularly community-based pharmacists – are playing an increasingly important role as members of program teams providing methadone maintenance treatment.<sup>30</sup>

### **Monitoring**

Ongoing monitoring of methadone dosage is an important aspect of treatment, in the initial stages of treatment as well as over time to ensure adequate dosage and minimize the risks.

### **Pain management**

Individuals who are receiving methadone maintenance treatment may also need – and should receive – appropriate treatment for chronic or acute pain. This includes standard pharmaceutical or non-pharmaceutical treatments for mild to moderate pain. In addition, for more severe pain, opioid analgesics may also be needed, and should be provided in the usual dosage for the level of pain being experienced. Given that clients/patients may have developed tolerance to the analgesic effects of opioids, frequent reassessment is advised to ensure adequate dosage of analgesics for effective pain management (Brands and Janecek, 2000, 28).<sup>31</sup>

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30 For a detailed overview and exploration of these issues, readers are encouraged to consult Brands and Janecek (2000).

31 See also Brands et al. (2000, 244-245) for more information on pain management in individuals receiving methadone maintenance treatment.

☛ Linkages with pain clinics may be useful.

### **Directly observed vs. take-home doses**

Flexibility in take-home doses has been associated with increased retention in treatment (Ball and Ross, as cited in Lowinson, et al., 1997, 412). Nonetheless, the way in which the actual dose of methadone is administered to clients/patients is a subject of much discussion and debate. For many clients/patients, daily attendance to receive a supervised dose of methadone is, among other things, inconvenient and disruptive. Compulsory supervised dosing can interfere with holding a job, attending school, caring for children, and travelling. It also implies a lack of trust, given that one of the main reason for supervising dosages is to ensure that clients/patients actually take their methadone.

At the same time, there may be a therapeutic benefit to either daily attendance or providing take-home doses (or “carries”). Daily attendance, particularly in the early stages of treatment, may be beneficial in increasing contact between clients/patients and the program team, and may be helpful in building a daily routine that is less stressful or chaotic than previous drug-seeking behaviours. Early in treatment, frequent, observed dosing can be an aid to establishing a properly adjusted dose, resulting in a stable opioid effect over time. Since this effect is the principal advantage of methadone, compared to other opioids, it can be undermined by clients/patients consuming their medication at irregular intervals.

Increasing frequency of take-home doses may be an effective incentive for reducing the use of other substances. Programs should balance the advantages of ensuring compliance and having regular contact with clients/patients with the need for flexible, client/patient-centred treatment that takes into account the realities of clients'/patients' lives.

### **Diversion**

The extent to which diversion of methadone actually happens – or represents a significant danger to the community – is an area of ongoing debate. The Institute of Medicine's (IOM's) 1995 report (as cited in Joseph, Stancliff and Langrod, 2000, 354) concluded that, while diversion is a concern, it “does not appear to be serious enough to take precedence over accessibility to treatment for untreated addicts.” The IOM report (as cited in Joseph et al., 2000, 360) also concludes that the level of regulation of methadone (which is linked in part to concerns about diversion): “...puts too much emphasis on protecting society from methadone, and not enough on protecting society from the epidemics of addiction, violence, and infectious diseases that methadone can help reduce.” Programs should balance measures to prevent potential diversion with the need to provide effective treatment.

## **5.4 Methadone Dosage During Pregnancy**

Properly prescribed and dispensed, methadone maintenance treatment is considered a medically safe treatment for pregnant women who are dependent on opioids.

For women who become pregnant while receiving methadone maintenance treatment, tapering from methadone is not recommended, as it can rarely be achieved without relapse or obstetrical complications. Pregnant women who wish to withdraw from methadone should be given as much information and counselling as possible so they can make an informed choice about tapering.

The pharmacokinetics of methadone are altered throughout pregnancy, especially in the third trimester (Jarvis, Wu-Pong, Kniseley and Schnoll, 1999). Methadone dosage should be carefully monitored and adjusted throughout pregnancy.

Dosage levels should be determined by the individual woman's need. There is no compelling evidence to reduce a woman's methadone dose to avoid neonatal abstinence syndrome (Kaltenbach, Berghella and Finnegan, 1998, 147-148). (See also Section 7.4: Methadone and Pregnant Women.)

Other treatment considerations for pregnant women receiving methadone maintenance are discussed in Section 7.4: MMT and Pregnant Women.

### **Insights from the field**

- ☞ Women may want to withdraw from treatment because they fear their newborn will be apprehended by child protection services.
- ☞ Pregnant women should be referred to practitioners with specialized knowledge of methadone maintenance treatment for pregnant women.

## **5.5 Unlimited Duration of Treatment**

Increased length of time in treatment is associated with improved treatment outcomes including reduced use of other opioids and reduced criminal activity. Short-term methadone maintenance treatment is associated with poorer outcomes (Ward et al., 1998b,330-331).

The duration of methadone maintenance treatment should be based on individual need rather than pre-determined time limits. It is not possible to determine an optimal duration of treatment for all individuals. The optimum duration is for each individual to continue receiving treatment for as long as they continue to benefit from it. Indefinite or lifetime maintenance on methadone is an option for some clients/patients.

### **Insights from the field**

- ☛ Don't ask people to decide if they want short-term or long-term treatment when they first present for treatment – clients/patients should make this decision over time.
- ☛ Tell clients/patients that they can remain in treatment for as long as they are receiving benefit from it.

## **5.6 Clear Criteria for Involuntary Discharge from Treatment**

Studies have shown that the vast majority of people who are dependent on opioids will relapse to other opioid use once discharged from methadone maintenance treatment (Ward et al., as cited in Ward, Mattick and Hall, 1998c,337). As well, they may experience other serious harm, and even fatal, consequences. A study by Dole and Joseph (as cited in Lowinson, et al., 1997, 411) found that, among people discharged from methadone maintenance treatment, the rate of opioid-related deaths was twice as high compared to those retained in treatment. The major difference in the cause of deaths was the increase in drug-related deaths after discharge. Since that study was conducted, the epidemics of infection with HIV, HCV and other blood-borne pathogens among injection drug users has added to the risk for those who are discharged from treatment.

Involuntary discharge from treatment should be approached with caution and avoided, if at all possible. Programs should adopt a problem-solving rather than a punitive approach when considering involuntary discharge of a client/patient. Ideally, tapering from methadone should be a mutual decision between a client/patient and his or her prescribing physician and other members of the program team. (See also Section 5.8: Client/Patient-Centred Management of Tapering.)

Although there will be an element of discretion in any decision to discharge a client/patient, programs should establish clear and reasonable criteria for considering discharge. These criteria should be clearly communicated to clients/patients at the outset of treatment. Where possible, there should be appropriate follow up of people who are discharged, and mechanisms for recourse.

Ideally, clients/patients should be retained in treatment for as long as they are benefiting from treatment.

### **Insights from the field**

- ☛ Reciprocal arrangements with other programs could allow a client/patient to transfer to a program that is a better “fit” instead of being discharged from treatment altogether.
- ☛ It is important to consider the context for a client’s/patient’s behaviour – is there a family or personal problem? Would counselling help?
- ☛ An appeal mechanism – such as a neutral third-party ombudsman – should be in place for clients/patients who are involuntarily discharged.
- ☛ Programs can offer to taper a client/patient gradually, and then, if they improve, treatment could be fully reinstated.
- ☛ Discharge can sometimes be therapeutic, in that clients/patients have to find and negotiate with another treatment provider or community-based pharmacy.
- ☛ More than one member of the program team should be involved in any decision to discharge a client/patient.
- ☛ Cold turkey withdrawal can lead to overdose and should be avoided.

### **5.7 Urine Toxicology Screening and Non-Punitive Approaches to Drug Use During Treatment**

Federal and provincial guidelines include requirements for treatment programs to conduct urine toxicology screening. Monitoring of clients/patients use of other drugs during treatment is done by methadone maintenance treatment programs to determine:

- whether or not clients/patients are complying with treatment, i.e. taking their methadone as prescribed;
- whether or not clients/patients are using any other drugs in addition to methadone;
- whether or not clients/patients are “double-doctoring” (obtaining prescriptions from more than one physician at the same time);
- confirmation of self-reported use of any other drugs; and
- outcomes (for purposes of program evaluation and research).

Programs should keep in mind, however, that reducing other drug use is not the primary goal of – but rather only one possible outcome of – methadone maintenance treatment.

## Urine toxicology screening

Urine toxicology screening is widely used to monitor clients/patients' use of drugs<sup>32</sup>. However, programs should clarify the purpose of, their approach to, and their use of the urine toxicology screening results.

There have been many suggested benefits of urine toxicology screening, including:

- objective information on clients'/patients' compliance with taking methadone as well as other (illicit) drug use, for clinical decision-making;
- deterrence and potential reduction of illicit drug use among clients/patients;
- objective information suitable for legal purposes, if required;
- increased contact with the program team, and a basis for establishing a bond between clients/patients and team members;
- quantifiable information for program evaluation purposes.

At the same time, however, there are disadvantages. Despite its widespread use in the field, critics add that urine toxicology screening is expensive, may be relatively inaccurate as an indicator of drug use, and can have a negative effect on clients/patients.<sup>33</sup> Furthermore, it has not been shown to be an effective means of deterring drug use.<sup>34</sup> Providing urine samples, particularly directly observed urine samples, can be humiliating for clients/patients – which may discourage them from staying in treatment – and it implies that clients/patients cannot be trusted to tell the truth about their drug use, which is not likely to contribute to positive relationships with team members.

Without condoning other drug use, programs should adopt a non-punitive and therapeutic, rather than a punitive, approach to other drug use during treatment. For example, a therapeutic approach includes using urine toxicology screening results as the basis for discussing treatment progress – and as an opportunity to problem-solve with clients/patients and provide information to clients/patients – rather than a means of “policing” clients/patients drug use or “catching” non-compliant clients/patients may also be useful.

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32 Current federal guidelines (Health and Welfare Canada, 1992) and existing provincial guidelines include specific requirements for urine toxicology screening.

33 See Ward, Mattick and Hall (1998i) for an extensive discussion of this literature on the advantages and disadvantages of the use of urinalysis.

34 Ward et al. (1998i) (citing Grevert and Weinberg; Goldstein and Judson; Havassy and Hall, 1998, 251) conclude that “there is little to be gained by using urinalysis to monitor drug use, if the main purpose of the procedure is to deter patients from using illicit drugs...on the basis of the available evidence, it has to be concluded that there is no compelling evidence that the absence of urinalysis leads to an increase in illicit drug use.”

Other suggestions related to the use of urine toxicology screening include:

- reduce costs and increase the accuracy of results from routine urine toxicology screening by accompanying it with:
  - different screening schedules for clients/patients at different states of treatment;
  - screening of stabilized clients/patients only for purposes of program evaluation;
  - random (rather than scheduled) screening that is either directly observed or temperature tested to avoid tampering;
- consider using random, infrequent screening for:
  - program evaluation; or
  - on-the-spot testing of clients/patients who show signs of intoxication or relapse;
- consider using a system of increased responsibility, such as take-home doses, for negative urine toxicology screens.<sup>35</sup>

### Self Reports

Research has shown that self report reveals as much information about drug use as urinalysis does (Magura et al., as cited in Ward et al., 1998i, 255), and the use of self report may foster better relationships with clients/patients.

### Hair Analysis

New technology, such as hair analysis, may be considered in the future as it becomes more accessible, accurate and affordable.

Information about the treatment of multiple substance use is provided in Section 7.1: MMT and People with Multiple Substance Use Behaviours.

#### Insights from the field

- ☞ On-the-spot testing that allows team members to discuss the results immediately with the client/patient is now available.
- ☞ Programs should focus on screening for opioid use rather than use of other substances – MMT is a treatment for opioid dependence and should focus on this aspect of clients'/patients' drug use.

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35 In reviews conducted by Stitzer et al. (as cited in Ward et al., 1998i, 253) the use of take-home methadone as a reward has been extensively evaluated and demonstrated as effective in reducing illicit drug use.

- ☞ Some clients/patients consider screening valuable, i.e. as a “positive incentive” to stop using drugs.
- ☞ Urine screening may also be used to learn about how treatment is going, e.g. why there was a relapse and what were the triggers?
- ☞ Reducing the costs of urine toxicology screening could free up resources that could then be invested in other aspects of programming, such as counselling.

## **5.8 Client/Patient-Centred Tapering**

### **Decision to Taper from Methadone**

Tapering from methadone should be a mutual decision that involves the client/patient and his or her prescribing physician and other members of the program team. Ideally, tapering from methadone should be voluntary – clients/patients and the program team should decide together if and when clients/patients will taper.

For many clients/patients, tapering from methadone can be a frightening prospect, and a difficult process. Clients/patients may be fearful and apprehensive about this decision.

Clients/patients may consider leaving treatment for a variety of reasons including:

- unrealistic expectations for recovery;
- pressure from family members and others, including program team members;
- the social stigma associated with methadone;
- program team members' beliefs about the desirability of abstinence from methadone as a goal of treatment;
- the inconvenience of regular attendance to obtain methadone and other program rules;
- financial reasons (cost of treatment);
- travel restrictions;
- to find out if they can manage without methadone or not, e.g. for individuals who have become stabilized on methadone, and have not used opioids in a long time, a decision to attempt tapering may be wise.

Regardless of their reason for attempting tapering, the client's/patient's decision should be respected, and the appropriate supports should be provided (see Tapering Management below). There should also, however, be a flexible approach to tapering, e.g. clients/patients should be assured re-entry into the program.

## **Tapering Management**

Clients/patients who decide to reduce their dose, or stop taking methadone altogether, should receive support and assistance to cope with withdrawal symptoms and other consequences of their decision.

A managed approach to tapering from methadone involves a stepwise approach, and it should include:

- Medical supervision, which includes clients/patients working closely with their prescribing physician and members of the multidisciplinary program team.
- Providing clients/patients with advice about options and information about the process. Clients/patients should be informed about the potential for relapse. They should be advised that, although successful tapering is always an alternative, long-term maintenance on methadone is possible. Information about the tapering process should be provided as it is happening.
- The methadone dose should be tapered slowly – the slower the better – and the rate of taper should be individualized. Clients/patients should participate in the decision making. They should have a choice as to whether or not they are told when the dose is reduced and by how much – some clients/patients may prefer blind dosing (i.e. not being told when and by how much their dose will be reduced), while others may not.
- Clients/patients should have access to increased supportive counselling throughout their taper, and they should be linked to community-based services that can provide after care programs and services to assist in the transition process.<sup>36</sup>

### **Insight from the field**

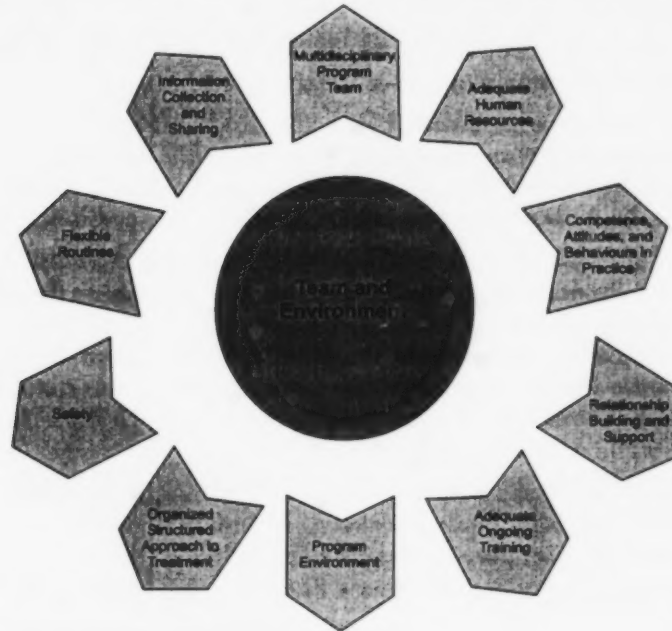
- ☛ Clients/patients being tapered off methadone should have access to an increased dose – to get through a “rough patch” – without having to go through a program re-entry process.

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36 See Ward et al.(1998c) for a more detailed discussion of their suggestions concerning this transition.

## **Section 6. Best Practices in MMT – Program Team and Environment**

### **Best Practices in MMT – Program Team and Environment**



#### **6.1 Multidisciplinary Program Team**

In this document, the program “team” is defined very broadly to include all those who may be involved in integrated comprehensive program delivery (see Section 4.6: Integrated Comprehensive Services). Depending on the program and setting (see Section 2.9: What is the Status Quo - How is Methadone Maintenance Treatment Delivered in Canada?), the program team may include – in addition to the prescribing physician – a large, multidisciplinary network of people who work in different capacities and locations. All of these individuals could have contact with clients/patients which may, in turn, have significant impact on treatment outcomes. A program, therefore, could include some or all of the following:

##### **Components:**

- methadone;
- medical care;
- other substance use treatment;
- counselling and support;

- mental health services;
- health Promotion, disease prevention and education.

Linkages with other community-based supports including:

- social Services;
- child, youth and family services;
- legal/justice supports;
- education;
- employment;
- other community resources.

Outreach and Advocacy

## **6.2 Adequate Human Resources**

To deliver treatment effectively – and to maximize an interdisciplinary approach – methadone maintenance treatment programs need adequate human resources and low staff turnover (Kreek; Centre for Substance Abuse Treatment, as cited in NIDA, 1995, 1-43). There should be sufficient numbers of qualified and trained team members (either on-site or linked through strong systems of referral) to deliver the program. The roles and responsibilities of various team members should be clearly articulated, and these descriptions should be a tool for building cohesion and fostering respect and recognition for the contributions of all team members.

### **Insight from the field**

- ☞ Need ongoing communication between team members, while also respecting the need for client/patient confidentiality.

## **6.3 Competence, Attitudes and Behaviours in Practice**

Research indicates that a commitment to abstinence-oriented treatment among program team members is associated with being an obstacle to providing effective treatment (Bell et al., as cited in Bell, 1998a, 170). This suggests that team members' attitudes to methadone maintenance treatment – and to the people receiving it – are likely to be an important factor in program effectiveness. Consequently, it is important that team members be open to a variety of different treatment approaches (see Section 4.3: A Maintenance Orientation). In addition,

team members need to have respect for clients'/patients' diversity of experiences and goals; a motivational style of interaction; and sensitivity to issues related to gender, culture, age, and other factors.

Team members also need to possess a particular knowledge, experience, ability and personal suitability to deliver methadone maintenance treatment effectively and with integrity. (See also Section 6.5: Adequate Ongoing Training)

#### **Insight from the field**

- ☛ Each program should have a code of ethics for team members.

### **6.4 Relationship Building and Support**

Higher levels of trust and confidence between team members and clients/patients is associated with longer retention in treatment (Ball and Ross, as cited in Lowinson et al., 1997, 412). This suggests that the quality of the relationships between team members and clients/patients may have a significant influence on a variety of potential treatment outcomes. Both clients/patients and team members alike are likely to benefit from having healthy interpersonal relationships and a supportive atmosphere within the program. (See also Section 4.7: Client/Patient Involvement)

#### **Insights from the field**

- ☛ Focus on integration and inclusion of all team members and clients/patients.
- ☛ Regardless of the setting, programs should offer a "zone of tolerance" for clients/patients who are often highly marginalized.
- ☛ The quality of relationships will affect compliance, attitude, motivation of clients/patients – if clients/patients are treated differently from other people, they may become resentful and act accordingly.
- ☛ Team members' view of their work will be enhanced by having positive relationships with clients/patients.
- ☛ Since relationships are a pivotal factor in how well treatment works, they should be a point of focus for measuring outcomes.
- ☛ It is essential for clients/patients to have a non-judgmental person, such as an ombudsman, to talk to.
- ☛ Clients/patients should have the option of transferring to other programs if they do not feel comfortable in their relationship with the program team.
- ☛ Physicians and other members of the program team need supports such as training, mentorship, supervision, etc.

## 6.5 Adequate Ongoing Training

Given that the attitudes of the program team, and the quality of their relationships with clients/patients, will influence treatment outcome, providing adequate and appropriate training for all team members is key to improving treatment outcomes. Well-trained staff are an influential factor in client/patient retention (Ball and Ross, as cited in Lowinson et al., 1997, 412).

Some of the critical areas that should be addressed include:

- substance dependence/substance abuse;
- opioid dependence;
- the principles and goals of methadone maintenance treatment;
- empirical evidence about the effectiveness of methadone maintenance treatment;
- values clarification;
- client/patient-centred approach to treatment;
- assessment;
- safe and effective dosing;
- delivering structured treatment;
- addressing the needs of individual clients/patients; and
- professional conduct in delivering treatment.<sup>37</sup>

### Insights from the field

- ☞ Develop multidisciplinary training (conferences, workshops, training sessions) for all those involved in program delivery (physicians, pharmacists, nurses, counsellors, community stakeholders and others) to foster a team approach and enhance awareness of one another's roles.
- ☞ Incorporate topics of interest to different members of the team.
- ☞ Other potential training topics could include:
  - addiction medicine;
  - methadone "myths";
  - psychosocial counselling;
  - pharmacology and pharmacokinetics;

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37 See also Bell (1998b) for a detailed discussion of staff training in methadone maintenance treatment programs.

- attitudes and values - specifically, the need to avoid paternalism, judgmental attitudes, recognize client/patient autonomy and the need for mutual respect and sensitivity to culture, gender, etc.;
  - drug interactions and side-effects;
  - substance use counselling;
  - relapse prevention;
  - motivational interviewing;
  - management of aggressive behaviour;
  - responding to needs as they emerge during treatment;
  - prevention of burnout; and
  - community resources and contacts.
- ☛ All team members should engage in continuous professional development.
  - ☛ Colleges should support educational initiatives for members such as:
    - education/recruitment of physicians, e.g. by attending Grand Rounds;
    - developing videos for specific groups of practitioners, e.g. family physicians, pharmacists;
    - providing education programs for physicians interested in becoming authorized to prescribe methadone and for pharmacists interested in dispensing methadone;
    - sponsoring Continuing Medical Education workshops in addiction medicine for physicians.
  - ☛ Clients/patients need to be educated about:
    - their rights and obligations;
    - legal and ethical issues;
    - the rights and obligations of physicians and other team members; and
    - the history of methadone maintenance treatment.
  - ☛ Need to develop a list of available Canadian training materials and contacts.
  - ☛ Physicians should be reimbursed while they attend training.
  - ☛ There should be a telephone hotline for information and assistance for treatment providers.

## **6.6 Program Environment**

Although the link between program environment and program effectiveness has not been extensively researched, the evidence suggests that an environment that supports trusting and confidential relationships between team members and clients/patients – and a program environment that is characterized by high team morale and low team turnover – can have a positive influence on client/patient retention (Ball and Ross, as cited in Lowinson et al., 1997, 412).

## **6.7 Organized, Structured Approach to Treatment**

A well-organized, structured program should be based on:

- a clear program rationale and objectives;
- a team approach to program delivery which includes: clear job descriptions for all team members, clear lines of communication between team members, regular team meetings;
- clear communication with clients/patients about program policies and expectations, from the outset;
- qualified team members, appropriately trained to deliver methadone maintenance treatment; and
- appropriate facilities with sufficient space to provide access to a variety of services, encourage interaction between team members and clients/patients, and ensure privacy for examinations, taking doses of methadone, counselling, and case work.

### **Insight from the field**

- ☞ A well organized structured program should be grounded in theory, include manual-based interventions and include ongoing program evaluation.

## **6.8 Safety**

Programs need to take appropriate steps to ensure that clients/patients and all team members are protected from harassment, victimization and stigmatization. The program rules and expectations about behaviour need to be clear. The enforcement of the rules should be fair and consistent to establish safe limits within which the program can operate.

Team members should be appropriately trained to handle anger and conflict.

Attention should also be paid to the safety of the location of the program, and to issues of personal security within and in the vicinity of the program.

### **Insights from the field**

- ☞ Team members and clients/patients must feel safe in the program environment – some clients/patients may be accompanied by their children and the environment must be safe for them as well.

- ☛ Either establish security protocols to deal with any potentially dangerous situation – for example, scheduling clients/patients with a history of violence at times when appropriately trained personnel will be available – or refer those individuals to programs with appropriate security measures in place.
- ☛ Physicians in private practice may need to address safety issues through client/patient screening and, if a client/patient is not suitable for treatment in private practice, refer them to a suitable agency.

## 6.9 Flexible Routines

Daily attendance for methadone dosing at a clinic or community-based pharmacy may offer some advantages, usually in the early part of treatment. For example, daily attendance may offer a structured daily routine that is an alternative to drug-seeking activities. Daily contact with team members can help establish a positive ongoing therapeutic relationship. A structured routine may make treatment safer by minimizing the risk of diversion, and ensuring a stable amount of methadone is taken on a regular schedule.

Routines, however, should be flexible. Prolonged periods of daily attendance may not be appropriate for all clients/patients. Over time, clients/patients may benefit from other approaches including flexibility concerning take-home doses.<sup>38</sup> Once the dose requirements are established and the dose is stabilized, daily attendance should not be a rigid requirement that interferes with other positive outcomes of treatment including employment, education, and other types of positive social involvement.

### Insights from the field

- ☛ Providing clients/patients with take-home doses is likely to be a key factor in increasing client/patient retention.
- ☛ Programs should avoid using take-home doses as “rewards” – this is degrading for clients/patients and sends the wrong message.
- ☛ Physicians should consult with the client/patient and other team members including pharmacists and substance use counsellors, before providing clients/patients with take-home doses of methadone.

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38 Flexible take-home doses are an influential factor in client/patient retention according to research by Ball and Ross, (as cited in Lowinson et al., 1997, 412).

## **6.10 Information Collection and Sharing**

### **Record Keeping**

Programs should have an organized approach to record keeping that emphasizes the value of program data for treatment, research, evaluation and administration purposes.

The information collection and record keeping process should be based on appropriate protocols, which clarify the information items to be collected. There should be ethical guidelines in place to ensure confidentiality is protected.

### **Information Sharing**

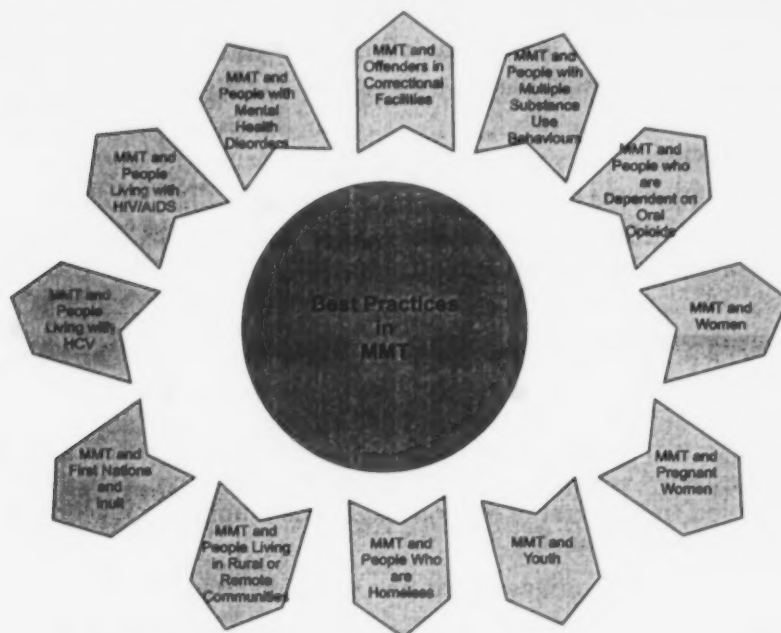
Clients/patients should have access to information about the program from the outset. Other relevant information should also be shared with clients/patients at appropriate points throughout treatment.

#### **Insights from the field**

- ☛ Establish information sharing protocols among team members, including those working in external settings, e.g. notification of family physicians ("Dear Doctor" letters), liaison and referral to other agencies, communication with community-based pharmacies, etc.
- ☛ Respect client/patient confidentiality and maintain client/patient safety.
- ☛ Pharmacies should establish private dispensing areas, where possible.
- ☛ Information sharing with clients/patients is fundamental to building trust and positive relationships.
- ☛ Provide clear, written information for clients/patients from the outset.
- ☛ Establish feedback mechanisms for clients/patients and team members.
- ☛ Establish a fair appeals mechanism, such as a neutral, third-party ombudsman.
- ☛ Inform clients/patients as to how to provide feedback, or make a complaint.

## **Section 7. Best Practices in MMT – Meeting the Needs of Specific Groups**

### **Best Practices in MMT – Meeting the Needs of Specific Groups**



Contrary to stereotyped images of “drug addicts,” people who are dependent on opioids are a highly diverse group of men and women, in different age groups, with varying socioeconomic circumstances, involved in different types of relationships and family situations, from diverse cultural backgrounds, and with unique life circumstances. Clients/patients may live in urban, rural or remote areas of the country, and they may have other physical or mental health problems in addition to dependence on opioids. Clients’/patients’ specific needs will depend on these and other factors. Some the groups of client/patients that may experience specific barriers and have unique needs include:

- people with multiple substance use behaviours;
- people who are dependent on oral opioids;
- women;
- youth;
- homeless persons;

- people living in rural or remote areas;
- First Nations and Inuit clients/patients;
- people living with HCV;
- people living with HIV/AIDS;
- people living with mental health disorders; and
- offenders in the correctional system.

Information about the needs of some of these groups is more readily available than it is for others. The following sections highlight some of the key considerations for each group, where information is available.

## **7.1 MMT and People with Multiple Substance Use Behaviours**

Multiple substance use is very common among people who are dependent on opioids – practitioners delivering methadone maintenance treatment will almost certainly deal with this issue. Cocaine and crack use is very common, and clients/patients may use as many as four or five psychoactive substances including cocaine, crack, benzodiazepines, marijuana, alcohol, tobacco or other substances (Brooner et al.; Nirenberg et al., as cited in Stitzer and Chutuape, 1999, 87). There is evidence that opioid use (but also the use of cocaine, marijuana and alcohol) decreases during methadone maintenance treatment (National Consensus Panel on Effective Medical Treatment of Opiate Addiction, 1998, 1939; NIDA, 1995, 4-15).

Retention in treatment – including, for example, retaining clients/patients who use cocaine while receiving methadone maintenance treatment – can help to reduce the harm associated with continued drug use. Although MMT is used to treat opioid dependence specifically, if clients/patients take advantage of the services provided by the program they may be more likely to change their lifestyle, avoid drug-using friends and, consequently, also decrease or stop other drug use.

Where clients/patients have substance use problems, in addition to opioid dependence, a range of clinical responses can be used in combination with methadone maintenance treatment. For more information on effective substance use treatment approaches, readers are also encouraged to consult Health Canada's report on best practices in substance abuse treatment and rehabilitation (Health Canada, 1999a), as well as other forthcoming publications from Health Canada on specific areas of substance abuse treatment and rehabilitation.

### **Insights from the field**

Focus on reducing rather than eliminating other substance use:

- ☛ Treatment should focus on reducing harm associated with drug use, rather than on achieving abstinence from all drugs.
- ☛ Low threshold programs are particularly important for reaching people with multiple substance use behaviours – these programs ensure that individuals who continue to use other drugs can still receive methadone maintenance treatment for their opioid dependence. Providing these individuals with an opportunity for contact with service providers “keeps the door open” to other treatment options.

## **7.2 MMT and People who are Dependent on Oral Opioids**

Although stereotypes of drug users suggest that all people who are dependent on opioids are injection drug users, this is not the case – many people are dependent on opioids which are taken orally rather than injected, while others may snort or smoke opioids such as heroin. Methadone maintenance treatment is considered an appropriate treatment option for all people who meet the DSM-IV criteria for dependence on opioids regardless of the route of administration.

### **Insights from the field**

Education and awareness:

- ☛ Address myths that people who are dependent on oral opioids are not suited to methadone maintenance treatment.
- ☛ Inform people who are dependent on oral opioids that MMT is a treatment option.

Treatment:

- ☛ The signs of opioid dependence may be less obvious among individuals who are dependent on oral opioids;
- ☛ Outpatient treatment delivered by family physicians can be effective for individuals who are dependent on oral opioids (and for others who are dependent on opioids that are injected, snorted or smoked).

Pain control:

- ☛ Pain control is a common issue for individuals who are dependent on oral opioids – clients/patients may need additional medication and/or rehabilitation for chronic pain, and linkages to pain clinics are key.

### **7.3 MMT and Women**

Barriers that may limit women's access to treatment include, among others:

- insufficient women-focussed outreach;
- social stigmatization of women drug users, including by the medical community;
- lack of gender-specific treatment to address women's issues, including lack of attention to psychosocial issues, exclusive focus on abstinence-oriented counselling;
- gender or cultural insensitivity in treatment programs;
- fear of losing custody of their children; and
- lack of child care or care for other dependent family members.

As a result of the barriers they face in accessing treatment, when they do actually enter treatment, women who are dependent on opioids tend to have poorer overall functioning and more medical, psychological, social, family, legal and economic problems than men.

Comprehensive services for women should address gender-related concerns in many different areas including:

- medical care;
- psychological, social, and relationship issues;
- economic and legal needs; and
- other issues.<sup>39</sup>

#### **Medical care and women who are dependent on opioids**

While all individuals entering treatment should be screened for medical needs, female clients/patients tend to have more severe medical problems than their male counterparts. In addition to the injection-drug use related medical problems noted in Section 4.6.1 above, they are at increased risk of reproductive problems, gynecological conditions and STDs. Compared to men who use drugs, women who use drugs have a higher risk of infection with HIV. For example, there is a higher risk of HIV infection because the virus is more easily transmitted from men to women during sexual intercourse, women are more likely to finance their drug use by having unprotected sex with men, and women more often have sexual partners who engage in high risk behaviours (McCaul and Svikis, as cited in Jones, Velez, McCaul and Svikis, 1999, 254). Women are also at high risk for exposure to HCV and other blood-borne pathogens (Health Canada, 2000a, 18). This means, women receiving methadone maintenance treatment may need medical care that includes:

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39 For more information on effective approaches to providing treatment for women with substance use problems, please see Health Canada (2001a).

- general health care;
- obstetric and gynecological care (see Services for Pregnant Women below);
- prevention and/or treatment interventions for infection with HIV, HCV or other blood-borne pathogens;
- prevention and/or treatment interventions for STDs;
- nutrition counselling and treatment for eating disorders; and
- family planning.

### **Psychological, social and relationship issues**

According to the literature reviewed by Jones et al, (1999, 253-254), compared to women who do not use substances, women who use substances are more likely to have a family history of alcohol or drug dependence, tend to have higher rates of childhood sexual abuse and are more likely to have relationships with men who have substance use problems and to experience violence at the hands of their partners. They are at increased risk for affective disorders, attempted suicide, low self-esteem, anxiety and depression. They may have high psychological distress, unresolved sexual issues and difficulties in relationships and social functioning. They may have experienced social isolation and loneliness, have difficulties socializing, and have smaller support networks and fewer friends or romantic relationships. They are more likely to be separated or divorced, to be passive in their relationships, and to lack confidence in their communication skills.

Treatment for women should include women-only groups to address issues of depression and anxiety, physical, sexual and psychological abuse, sexuality, loss, and to enhance self-efficacy.

Women may also need access to other substance use treatment, parenting skills, communication skills, conflict resolution, and help in developing a support network.

### **Economic and legal needs**

Treatment should take into account the vulnerable economic and legal status of women who are dependent on opioids. According to the literature reviewed by Jones et al. (1999, 254-255), they may have poorer occupational functioning; they may be economically dependent on men; they may be involved in prostitution or exchanging sex for drugs, food, shelter. They may have low job skills and little vocational training. They may have a history of involvement with the criminal justice system.

Some of the strategies to help women improve their economic and legal situation may include, for example, establishing effective linkages with programs that can provide:

- vocational training and skills development;

- interview and job-skills training;
- employment programs;
- support to maintain a job;
- money management; and
- access to legal services.

### **Other considerations**

Given the many barriers to treatment that women face, there are many forms of support that could facilitate their access to and retention in treatment. Some of the areas that should be addressed include, among others:

- child care during treatment;
- transportation;
- safe housing;
- literacy; and
- outreach involving community based workers; and organizations.

### **Insights from the field**

To improve treatment for women clients/patients, programs should provide:

- ☞ Screening for women-specific medical concerns.
- ☞ Access to safety planning and safe housing.
- ☞ Support and counselling to address issues of abuse including post-traumatic stress services.
- ☞ Counselling by and for women (individual or group).
- ☞ Women-specific programming in areas such as:
  - nutrition;
  - smoking;
  - health, including reproductive health issues such as sexuality, menses, birth control methods (combined with MMT), and safe sex. They are likely to be "the last one on the needle" and are more at risk of being injected by their partners. Programs should be sensitive to women who have worked in the sex trade. Programs should recognize that women who are using heroin may not experience regular menses, but should still use birth control;
  - parenting;
  - assertiveness training;
  - improved self-esteem;

- healthy relationships;
  - employment (referrals, job coaches, etc.).
- ☞ There should be linkages to other women-specific substance use treatment.
- ☞ There should be training for all team members in gender-related issues.

## **7.4 MMT and Pregnant Women**

Pregnant women who are dependent on opioids experience inadequate nutrition and rest, poor access to obstetrical care, and exposure to fluctuating blood levels of opioids and other drugs, as well as contaminants and infections related to injection drug use. They are at high risk for a range of obstetrical problems (Jones et al., 1999, 260).

Methadone maintenance treatment is considered the standard of care for women who are pregnant and dependent on opioids. The potential benefits include:

- safer, medically supervised opioid use (stable supply, pure quality, no fluctuating blood level, no exposure to contaminants);
- better antenatal care;
- increased fetal growth;
- reduced fetal mortality;
- increased likelihood of carrying pregnancy to term;
- fewer birth complications;
- decreased risk of transmission of HIV (and potentially HCV and other blood-borne pathogens) (including decreased risk of transmission of HIV to infants<sup>40</sup>);
- decreased cases of preeclampsia and neonatal abstinence syndrome;
- increased likelihood that infant will be discharged into his or her parents' care; and
- increased retention in treatment (Kandall et al.; Finnegan; Svikis et al., as cited in Jones et al., 1999, 258).

Methadone maintenance treatment during pregnancy is an opportunity to provide medical and:

- obstetric care in addition to treatment for opioid dependence. Providing integrated comprehensive services for pregnant women who are dependent on opioids should include:

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40 According to the National Consensus Development Panel on Effective Medical Treatment of Opiate Addiction (1998, 1939), women who are HIV-positive and are receiving MMT are more likely to be treated with the help of medication in order to reduce the rate of transmission of HIV infection to their infants.

- appropriate methadone dose and dosage monitoring (see Section 5.3: Adequate Individualized Dosage);
- primary medical care for drug-related and co-morbid medical conditions;
- evaluation, monitoring, care, support and treatment of infection with HIV, HCV and other blood-borne pathogens for mothers, and for infants if necessary;
- intensive perinatal management for high risk pregnancy;
- non-judgmental antenatal care including special clinic times;
- access to analgesia or anaesthesia during labour or birth, and provision of opioids after birth;
- women-only group work and psychosocial counselling for a wide range of issues;
- women-only prenatal and parenting programs;
- mental health assessment and services;
- encouragement of breastfeeding (women who have acquired HIV, HCV or other blood-borne pathogens should discuss the pros and cons of breastfeeding thoroughly with their physician).

### **Methadone and Neonates**

As mentioned in Section 5.3: Adequate Individualized Dosage, dosage levels during pregnancy should be determined by the individual woman's need. There is no compelling evidence that reducing a woman's methadone dose helps to reduce the severity or likelihood of neonatal abstinence syndrome (Kaltenbach et al., 1998, 147-148).

After the baby is born, appropriate care of the infant includes:

- assessment and management of neonatal abstinence syndrome using specially designed instruments; and
- appropriate medication as needed.<sup>41</sup>

### **Insights from the field**

- ☞ At birth, infants should not be assumed to be dependent on opioids, but should be properly assessed.
- ☞ Pregnant women who are dependent on opioids should have priority access to methadone maintenance treatment, and access should be from multiple entry points.

<sup>41</sup> For more information on methadone maintenance treatment and neonates, please see Brands et al. (2000, 239-240).

- ☛ Programs should recognize that fear of having a child apprehended is a key issue for clients/patients.
- ☛ Programs should provide immediate intensive support, as well as long-term services and supports.
- ☛ Programs should encourage the involvement of partner, if a woman wants this.

**Short term:**

- ☛ Provide access to high risk obstetrical services.
- ☛ Involve client/patient in all decision making.
- ☛ Establish close consultation and good communication between MMT program team and all others involved in pre- or postnatal care (obstetricians, social workers, etc.).
- ☛ Provide referrals to practitioners who specialize in treating pregnant women who are dependent on opioids, e.g. some physicians and hospitals have a specific capacity to care for pregnant women who are dependent on opioids.
- ☛ Establish clear protocols – admission should be to maternity floor not to psychiatric ward.
- ☛ Provide pregnant women with education about:
  - methadone and pregnancy;
  - risk of miscarriage;
  - drug interactions;
  - pain management during delivery;
  - child welfare involvement (note: linkages to child welfare should be in place, but there should be a focus on facilitating a woman's ability to keep her child as well as an emphasis on child protection).

**Longer Term:**

- ☛ There should be a post-pregnancy follow up assessment to determine if methadone maintenance treatment is still the most appropriate treatment option.
- ☛ Provide parenting support.

## **7.5 MMT and Youth**

Given that research reviewed by several national organizations has shown that youth, particularly street-involved youth, are at high risk of contracting HIV, HCV or other blood-borne pathogens as a result of injection drug use and needle sharing (Canadian Centre on Substance Abuse and Centre for Addictions and Mental Health, 1999, 175-176; Health Canada, 2000a, 1,6; Canadian HIV/AIDS Legal Network, 1999,11), there is a need for much more information and research on MMT and youth, particularly street-involved youth<sup>42</sup>. According to a leading practitioner in this area, methadone is not indicated as a first line therapy for adolescents with

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<sup>42</sup> Readers are encouraged to consult Health Canada's publication on youth and substance abuse (Health Canada, 2001b)

opioid dependence, as there are currently no evidence-based guidelines for use with this population. There may, however, be individual adolescents for whom methadone may be a reasonable option<sup>43</sup>. Recommendations for the management of adolescents (under the age of 18) who are dependent on opioids include: 1) assessment of the route of use, amount used, frequency of use, other substance use, withdrawal symptoms, prior attempts at withdrawal, medical problems, psychiatric problems, medications, social supports, etc., 2) withdrawal management using appropriate medications, initiation of treatment in either in-patient or, if possible, day treatment setting; monitoring of blood pressure (baseline and during treatment<sup>44</sup>); and, treatment of associated withdrawal symptoms. If client/patient is stable, continuation of tapering as an outpatient can be considered. Adolescents should be advised that, once they have withdrawn from heroin or other opioids, it is essential to continue in treatment due to the high rate of relapse to opioid use.<sup>45</sup>

### Insights from the field

- ☞ Providers should discuss other treatment options with youth before initiating MMT.
- ☞ MMT should be part of a full continuum of out-patient services for youth – need links with housing, mental health, food, job skills, education, counselling for trauma and abuse issues – and the other service providers should be knowledgeable about and accepting of methadone maintenance treatment.
- ☞ Need flexible treatment policies and a range of treatment options including low threshold programs which may be useful in engaging youth (no appointments, provide psycho-social services as needed, involve outreach workers/street workers in youth-focussed outreach).
- ☞ Need separate programs from adult programs.
- ☞ “Maintenance” may be relatively short term (a couple of years) rather than for a lifetime.
- ☞ Need specific criteria for maintenance - length of involvement, lifestyle risks, etc.
- ☞ Need for parental consent may be an issue, depending on age restrictions, which differ from one jurisdiction to another.

43 This document is not intended to provide readers with sufficient information to prescribe or dispense methadone to patients under the age of 18. Readers must consult their respective regulatory body as well as the federal guidelines (Health and Welfare Canada, 1992) and existing provincial guidelines for further information on prescribing methadone to this population.

44 Adolescent women may have hypotension which would require close monitoring of symptomatic hypotension, particularly orthostatic hypotension.

45 Dr. Karen Leslie, Staff Paediatrician, Division of Adolescent Medicine, Hospital for Sick Children. Assistant Professor in Paediatrics, The University of Toronto, personal communication, March 2001.

## **7.6 MMT and People who are Homeless**

More information and research on MMT and the needs of homeless people is needed.

### **Insights from the field**

- ☛ Outreach is key.
- ☛ Emphasize engagement via low threshold programs, e.g. storefront offices with flexible/extended hours, mobile vans, physicians in the shelters, etc.. People who are living on the streets may not be able to access other programs.
- ☛ Linkages to housing resources, income support, advocacy, counselling, medical care, mental health services.
- ☛ Access to showers, clothing, food.
- ☛ Education on preventing the transmission of HIV, HCV and other blood-borne pathogens (not sharing needles or any drug equipment).
- ☛ Take-home doses may not be advisable for people who cannot safely store medications (broken bottles, etc.).

## **7.7 MMT and People Living in Rural or Remote Communities**

In rural or remote communities, people who are dependent on opioids may have either no or limited access to methadone maintenance treatment. Potential obstacles include a lack of local physicians authorized to prescribe methadone; a lack of community pharmacists to dispense methadone; a lack of substance use treatment services; a lack of anonymity in local service settings; and difficulties obtaining or covering the cost of transportation to services located elsewhere.

Providing adequate services in rural and remote areas is a challenge for all of health care, and for substance use treatment in general. In the case of methadone, however, there can be some specific complications, including, among other issues, how to adequately initiate treatment with appropriate levels of assessment and monitoring; how to dispense methadone; and how to monitor the use of other drugs during treatment.

Depending on the resources available in the community, it may be difficult to provide a comprehensive approach to treatment, with linkages to the full range of services and supports that clients/patients may need. Practitioners may also lack access to information and supports.

Increasing access to methadone maintenance treatment in rural or remote communities is an important issue – there is anecdotal evidence that some clients/patients are not being started on methadone if they intend to return to a community where they will not be able to access treatment services.

## Insights from the field

- ☛ Educate public and practitioners – increase awareness of the reality of opioid dependence in these areas.
- ☛ Get input of local community in program development and monitoring:
  - foster linkages (e.g. through informal/formal advisory groups) within the community between all stakeholders including physicians, pharmacists, public health/health boards, hospitals, police, corrections, substance use treatment services, and other health care providers;
  - develop service contracts, protocols, communications mechanisms;
  - develop organized support networks – have an organized system of back up for physicians in small communities.
- ☛ Increase local service levels (for prescribing, dispensing, counselling):
  - recruit local family physicians;
  - recruit visiting physicians to work with local providers;
  - train nurse-practitioners to provide treatment;
  - establish “satellite” substance use treatment clinics integrated with local resources/providers (see below);
  - offer MMT treatment through local mental health services;
  - develop travelling facilities such as mobile vans, which can provide needle exchange and methadone.
- ☛ Integrate centralized services with local resources:
  - establish clear protocols with local practitioners (e.g. give clients/patients adequate support to travel to central location for initiation and stabilization; follow up locally; and provide take-home doses.);
  - permit methadone prescriptions to be faxed to community pharmacies;
  - explore alternative approaches to monitoring/urine toxicology screening;
  - recognize the need for flexibility when local circumstances demand it;
  - ensure adequate information sharing mechanisms, e.g. 24-hour toll-free telephone number for specialist advice, clearinghouse, e-mail, etc.;
  - provide opportunities for training (initial and ongoing) and mentorship:
    - in-person training (meetings, workshops, conferences);
    - distance education (videos, video conferencing, Internet);
    - mentorship that is based on personal (rather than institutional) relationships.

## **7.8 MMT and First Nations and Inuit**

While there is little or no literature available on MMT and First Nations and Inuit clients/patients, there has been a great deal of research on the issue of access to appropriate health care services for First Nations and Inuit communities. Injection drug use and high risks of infection with HIV, HCV and other blood-borne pathogens is an issue of growing concern (Canadian HIV/AIDS Legal Network, 1999, 1; Health Canada, 2000a, 1). Aboriginal people are over-represented among the population of people who use injection drugs in inner cities and among the clientele of needle exchange programs and counselling/referral sites (Health Canada, 1999b, 3). A growing proportion of AIDS cases among Aboriginal people are the result of injection drug use – injection drug use is the primary risk factor for Aboriginal women (Health Canada, 1999d, 2). Although some preliminary issues related to methadone maintenance treatment have been identified (below), there is a need for ongoing consultation with First Nations (on and off-reserve) and Inuit communities about the need for and approaches to methadone maintenance treatment.

### **Insights from the field**

#### **Research:**

- ☛ Work with First Nations and Inuit organizations to conduct surveys of First Nations and Inuit clients/patients and service providers in existing programs to identify additional needs.

#### **Community consultation:**

- ☛ Become educated about these communities before approaching them for consultation – e.g. find out what processes they require to invite others in; obtain consent.
- ☛ Use appropriate mechanisms and processes to consult with First Nations and Inuit communities about the issue of opioid dependence.

#### **Community development:**

- ☛ Devolution of health services is at different stages in different communities, and is an important contextual issue.
- ☛ May need community-based educational initiatives to raise awareness, address attitudinal barriers.

#### **Program development:**

- ☛ Develop culturally sensitive programs.
- ☛ Incorporate spiritual issues and native healing models.
- ☛ Include First Nations and Inuit counsellors on program team.
- ☛ Develop programs on reserves.

## 7.9 MMT and People Living with HCV

Given the high prevalence of the hepatitis C virus (HCV) among injection drug users in Canada<sup>46</sup> – and the extreme infectiousness of HCV<sup>47</sup> – many individuals who present for methadone maintenance treatment will either be HCV-positive when they enter treatment, or will become HCV-positive while in treatment. MMT programs should be prepared to identify evaluate, monitor, support and consider available treatment options for these individuals. For example, vaccination against hepatitis A may help prevent HCV-positive clients/patients acquiring an additional infection that could increase the risk of hepatic failure and death (Vento et al., as cited in Novick, 2000, 443).

Individuals with stable chronic liver disease can safely continue to receive methadone maintenance treatment for many years (Novick, 2000, 439), although caution must be exercised in some specific circumstances. In some cases, treatment for HCV infection can be provided in tandem with methadone dosing. Linkages with specialized clinicians in the community may also be required.

Treatment for HCV infection is an evolving area, and providers should become familiar with a number of pertinent issues, such as treatment effectiveness, side effects, eligibility constraints, contraindications, and variations in the availability of health coverage for treatment. Providers should also be aware that promising new treatments are expected to be available in the near future.<sup>48</sup>

### Insights from the field

Program delivery:

- ☛ Include testing for HCV infection.
- ☛ Include primary care for HCV infection including regular monitoring of liver function for those who are HCV positive, and referral as necessary to specialist treatment.

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46 Among individuals who inject drugs, the rate of infection with the hepatitis C virus is very high. International estimates range from 50% to 100% (Finch, as cited in Health Canada, 2000a, 1). In Canada, 70% of all prevalent HCV infections are related to injection drug use (LCDC, as cited in Health Canada, 2000a, 6).

47 HCV is 10 to 15 times more infectious through blood contact than HIV (Heintges and Wands, as cited in Health Canada, 2000a, 1).

48 Examples of two recent articles in this area include Hagan and Des Jarlais, 2000 and Novick, 2000.

## 7.10 MMT and People Living with HIV/AIDS

Given the prevalence of HIV infection among injection drug users, people who enter methadone maintenance treatment may either be HIV-positive on entry into treatment, or they may acquire HIV during the course of treatment if they continue to engage in high-risk behaviours. In particular, women who are dependent on drugs are at greater risk of acquiring HIV infection than their male counterparts (McCaul and Svikis, as cited in Jones et al., 1999, 252-253).

An important aspect of providing medical care to clients/patients in methadone treatment programs will include providing the necessary care and support for people who are living with HIV/AIDS. Among other potential benefits of MMT, stabilization on methadone may make it easier for people who are dependent on opioids and HIV-positive to comply with HIV treatment regimens.

Providers need to be knowledgeable about treatment for clients/patients who are HIV-positive. For example, practitioners providing methadone maintenance treatment should be aware of specific risks for people who are living with HIV/AIDS, such as:

- the risks of morbidity that is specifically related to injection drug use (endocarditis, abscesses and co-infection with HCV and other blood-borne pathogens);
- the higher rates of bacterial pneumonia and tuberculosis;
- the potential to develop drug-resistant strains of HIV, in the event of poor compliance with antiretroviral medications, and the;
- potential for drug interactions.<sup>49</sup>

### Insights from the field

Access to MMT treatment for people living with, or at risk of acquiring, HIV:

- ☞ Outreach is key.
- ☞ Should be priority access to MMT for people who are dependent on opioids and living with HIV/AIDS.
- ☞ Should engage clients/patients in MMT through STD clinics and low threshold programs.

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<sup>49</sup> For more information about potential interactions between methadone and drugs used to treat HIV/AIDS, readers are encouraged to consult, Brands and Janeczek (2000), and Gourevitch and Friedland (2000).

#### Program delivery:

- ☛ Include testing for HIV infection.
- ☛ Include primary care for HIV/AIDS including, for example.
- ☛ Appropriate treatment for opioid dependence and HIV/AIDS, e.g. combined therapy.
- ☛ Pain management.
- ☛ Include client/patient education on reducing needle use and needle sharing and other HIV transmission risk behaviours.
- ☛ Appropriate protocols concerning liaison with public health, notification, client/patient confidentiality.

#### Education:

- ☛ Sensitize people working in area of HIV/AIDS to the needs of people receiving methadone maintenance treatment.
- ☛ Expand current efforts to develop linkages and exchanges between people working in HIV/AIDS and providers of MMT.

### **7.11 MMT and People with Mental Health Disorders**

The prevalence of mental health disorders is very high among people who are dependent on opioids. Common conditions include major depression, dysthymic disorder, anti-social personality disorder and other personality disorders, anxiety disorder, attention-deficit-hyperactivity disorder. The following table provides information from an extensive review of the literature by King and Brooner (1999).

Differences between men and women with respect to prevalence of mental health disorders are the same as for those in the general population. In addition, women who are dependent on opioids experience more anxiety disorders and depressive disorders than men who are dependent on opioids. For example, men are more likely to be diagnosed with problems such as antisocial personality disorder, while women appear to have much higher levels of psychopathology, based on global measures (Ward, Mattick and Hall, 1998f, 432).

Clients/patients with mental health disorders are at increased risk for other substance use during and after treatment, and for risk behaviours, such as needle sharing (King and Brooner, 1999, 162; Brooner et al.; Brooner et al.; Gillet et al., as cited in Abbott, Moore, Weller and Delaney, 1998, 35). Identifying and providing treatment for mental health disorders can help improve methadone maintenance treatment outcomes, including retention (King and Brooner, 1999, 152).

Methadone maintenance programs are a key opportunity to identify and provide treatment for mental health disorders among clients/patients. Programs may be able to provide:

- access to mental health evaluations and treatment services, psychotherapy and counselling;
- a stable environment (daily attendance, clear rules, etc.);
- dispensing of other medications along with methadone doses;
- access to medical care;
- opportunities to establish relationships with health care providers;
- involvement in work; and
- involvement in psychosocial rehabilitation programs.

**Table 1: Prevalence of co-morbid mental health disorders  
(based on King and Brooner, 1999, 144-146)**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Prevalence of Mood Disorders</b></p> <ul style="list-style-type: none"> <li>• major depression (lifetime): 15.8% - 53.9%</li> <li>• major depression (current): 0% - 26.3% (lower rates may be due to length of stabilization in treatment, inclusion of people not receiving treatment, and absence of standard time frame for evaluation)</li> <li>• bipolar disorder(lifetime and current): 1% (same as general population)</li> <li>• dysthymic disorder: 3%-15%</li> </ul>                                                                          |
| <p><b>Prevalence of Anxiety Disorders</b></p> <ul style="list-style-type: none"> <li>• phobias (lifetime): 2.3%-9.6%</li> <li>• phobias (current): as high as 9.2%</li> <li>• generalized anxiety disorder (GAD) (lifetime): as high as 5.4%</li> <li>• GAD (current): 1%</li> <li>• panic disorder (lifetime): as high as 2%</li> <li>• panic disorder (current): less than 1%</li> <li>• obsessive-compulsive disorder(lifetime): less than 2% (relatively rare)</li> <li>• obsessive-compulsive disorder (current): 1% or less (relatively rare)</li> </ul> |
| <p><b>Prevalence of Personality Disorders</b></p> <ul style="list-style-type: none"> <li>• overall rate of personality disorders is high: 34.8% - 68%</li> <li>• antisocial personality disorder (APD):14.5% to 54.7% (most common personality disorder)</li> <li>• borderline personality disorder: 3.7%-12.1%</li> <li>• avoidant disorder:5%</li> <li>• passive-aggressive disorder:4%</li> <li>• paranoid disorder: 3%</li> </ul>                                                                                                                          |
| <p><b>Prevalence of Other Mental Health Disorders</b></p> <ul style="list-style-type: none"> <li>• schizophrenia: 1-2% (relatively rare)</li> <li>• eating disorders (lifetime): greater than 1% in women (current diagnosis is rare)</li> <li>• posttraumatic stress disorder (lifetime): 8.3% for cocaine/opiate users (significant problem)</li> <li>• attention-deficit hyperactivity disorder (ADHD): one-fifth have history of ADHD; 12% have current symptoms.</li> </ul>                                                                               |

Assessment of mental health disorders should be based on standardized tools. Clinical evaluation should be based on the standard diagnostic criteria contained in the DSM-IV.

In order to diagnose and treat independent mental health disorders, the presence of symptoms that stem from other medical conditions or from the use of other substances should be ruled out. For example, use of some substances – including methadone, marijuana, caffeine, nicotine, alcohol, cocaine, benzodiazepines, and other sedatives/hypnotics – may either cause symptoms which present as depression, or else interfere with the management of a mood disorder. To rule out substance-induced disorders, there is a need for skilled assessment that should take into account how symptoms respond to increases or decreases in drug use, or periods of abstinence (King and Brooner, 1999, 154).

Given the high numbers of clients/patients who experience mental health disorders, programs should be prepared to deal with the problems – for clients/patients and for team members – that can be associated with these disorders including:

- homelessness among clients/patients;
- angry outbursts by clients/patients (See Section 6.0: Best Practices in MMT: Program Team and Program Environment);
- hopelessness and anger among team members who feel overwhelmed;
- team members blaming clients/patients for their problems;
- stigmatization of those with mental health disorders and those who use drugs.

### **Insights from the field**

#### **Access to treatment:**

- ☛ Increase outreach services.
- ☛ Increase services for forensic substance use.

#### **Program delivery:**

- ☛ Establish partnerships with mental health services in the community so that clients/patients who have been stabilized on MMT can be referred to, and accepted into treatment by, community mental health services.
- ☛ Include mental health practitioners on program team and ensure good communication among all team members.
- ☛ Offer MMT within mental health facilities.
- ☛ Stabilize clients/patients on methadone first, and then assess primary vs. secondary mental health disorders.
- ☛ Utilize family physicians for follow up care.

## Education:

- ☛ Increase awareness and address attitudinal barriers among mental health practitioners.
- ☛ Educate mental health practitioners about need for combined therapy – clients/patients do not necessarily need to be taken off methadone to receive treatment for other mental health disorders.
- ☛ Educate practitioners about substance use and mental health issues.

## 7.12 MMT and Offenders in Correctional Facilities

In recent years, several national level reports have focussed attention on the issue of drug use in correctional facilities in Canada – including the over-representation of injection drug users among offender populations; the prevalence of drug injecting and needle sharing during incarceration; and risks of transmission of HIV, HCV and other blood-borne pathogens (Canadian HIV/AIDS Legal Network and Canadian AIDS Society, 1996; Canadian Centre on Substance Abuse and Canadian Public Health Association, 1997; Canadian HIV/AIDS Legal Network, 1999).<sup>50</sup>

Internationally, and in Canada, access to methadone maintenance treatment for offenders who are dependent on opioids has been identified as a key harm reduction strategy, and many methadone-related recommendations have been made to reduce the harm related to drug use in correctional facilities.

Experts suggest that there are a number of different points at which methadone maintenance treatment should be provided to offenders including:

- *Entry into the correctional facility.* Since so many individuals who inject drugs are incarcerated, opioid withdrawal is very common. Treatment for withdrawal should be provided.
- *During incarceration.* There are much higher rates of injection-related risk behaviours in correctional facilities, and methadone maintenance probably helps reduce the transmission of HIV (although documented evidence of HIV transmission in correctional facilities is difficult to obtain), and potentially the transmission of HCV and other blood-borne pathogens. Other prevention strategies such as syringe exchange and bleach programs are either not commonly available in correctional facilities or are not particularly effective (Dolan et al., 1998, 383-384, 389). Programs need to address the needs of those who begin injecting drugs while incarcerated, as well as those who are dependent on opioids on incarceration.

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50 In a Quebec correctional facility, for example, 38% of women offenders reported injecting drugs before being incarcerated, and half of those had shared needles. Of those who had injected previously, 11% reported injecting drugs during incarceration, with 92% of those sharing needles. Among the men offenders in the study, 26% reported injecting drugs before incarceration, and half of those had shared needles. Of those who had injected previously, 2% reported injecting drugs while incarcerated, with most of those (92%) having shared needles (Dufour et al., as cited in Health Canada, 2000c,2).

- *Pre-release.* Providing methadone to offenders nearing release can increase tolerance and reduce risk of overdose, reduce illegal activity after release, and reduce likelihood of reincarceration. (Dolan, Hall and Wodak, 1998, 382)
- *During reintegration into the community.* Linkages to appropriate community services are key to ensure a continuum of treatment and support.

It is important that corrections-based methadone maintenance treatment programs are responsive to the needs of both men and women offenders, are combined with psycho-social interventions that target criminogenic needs, conform to evidenced-based principles of effective correctional treatment, and draw on the standards of methadone maintenance treatment in community-based programs.

Rigorous evaluations of corrections-based MMT programs are also needed (Dolan et al., 1998, 386).

### **Insights from the field**

Increase access to MMT within correctional systems:

- ☞ Correctional settings provide a prime opportunity to provide treatment – incarceration may provide the only contact some offenders have with medical and other services.
- ☞ Implement programs in all provincial and federal correctional facilities:
  - people who are receiving methadone maintenance treatment prior to entering correctional facilities should continue to receive treatment (this includes people in remand centres);
  - offenders who are dependent on opioids should have the option of starting methadone maintenance treatment while incarcerated;
  - pregnant offenders who are dependent on opioids should have access to methadone maintenance treatment.
- ☞ Should be mandatory condition of employment for all physicians working in corrections to obtain authorization to prescribe methadone.
- ☞ If necessary, bring in physicians from the community to prescribe methadone for offenders (this is also helpful for establishing linkages with the community after offenders are released).

Program delivery:

- ☞ MMT in correctional settings should be consistent with the standards and norms of community-based MMT.
- ☞ Multidisciplinary approach should include physicians, nurses, substance use counsellors (with specific methadone expertise), social workers, probation officers, community mental health liaison workers, etc.

- ☛ Ensure offenders are taken to appointments with their physician and medical transport should be provided, as for other health problems.

#### Education:

- ☛ Education and training should be provided to all correctional personnel and law enforcement personnel to address:
  - effectiveness and benefits of methadone (e.g. in reducing transmission of HIV, and potentially the transmission of HCV and other blood-borne pathogens);
  - attitudes and misconceptions (including issue of diversion).
- ☛ Jurisdictions may be able to share resources for training team members.

#### Research:

- ☛ Document extent of existing programming available in federal and provincial facilities.

#### Continuity of care:

- ☛ Make MMT available in all correctional facilities at all levels.
- ☛ Develop working linkage between key organizations/community-based services – methadone maintenance treatment programs/practitioners, pharmacists, employment services, family services, housing, child welfare, etc. – and correctional facilities to ensure that there is adequate information sharing and liaison to provide continuity of care for people entering the correctional system, or for people who are being released (release planning, follow up, workable referral systems, good communication, awareness of community-based resources including treatment programs as well as other services such as Elizabeth Fry, John Howard Society, and others).
- ☛ Involve correctional and law enforcement representatives on community advisory groups on methadone (this is useful in establishing effective community liaison):
  - police can accompany clients/patients to court and ensure that clients/patients whose charges are dismissed by the courts are given back their methadone doses before being released;
  - drug treatment courts.

## **Section 8. Research and Evaluation**

Research and evaluation of methadone maintenance treatment – and particularly research and evaluation in the Canadian context – is essential to:

- increase the understanding, acceptance of and level of support for methadone maintenance treatment in Canada;
- refine program delivery on an ongoing basis;
- identify the most effective ways to address the needs of diverse client/patient groups;
- improve treatment outcomes; and
- reduce the harms associated with opioid-dependence.

### **8.1 Research Gaps**

More research on methadone maintenance treatment is needed in many different areas. For example, some treatment goals have not received as much research attention as others including the role of MMT in the:

- reduction of the transmission of HIV, HCV and other blood-borne pathogens;
- achievement of improvements in clients'/patients' quality of life and social productivity;
- improvements in community public health and safety;
- outcomes for specific groups of clients/patients including, among others, women and ethnocultural groups; and how best to meet these needs;
- treatment of adolescents/youth;
- effectiveness of low threshold interventions in Canadian context;
- program acceptability (to clients/patients and to society);
- alternative medications/treatments available in other countries;
- pain management;
- human resources; and
- screening/assessment and outcome measurement tools (particularly tools designed to make these tasks feasible for practitioners in smaller communities).

There is also a need for more research on the cost-benefits and cost-effectiveness of methadone maintenance treatment.

## **Insights from the field**

- ☞ All research requires informed consent of clients/patients and an ethical review process.
- ☞ There should be significant client/patient involvement in determining research priorities and expenditures in the MMT field, as well as in conducting and participating in specific research studies.
- ☞ Need to develop protocols for research and information collection in the field of MMT. Protocols should identify what is measurable, and clarify what information should be collected, at what level, and how.

### **8.2 Need for Evaluation**

Evaluation of MMT programs is an extremely important tool for determining the extent to which programs meet their objectives and the needs of clients/patients; improving program delivery; and comparing the effectiveness of different types of treatment delivery models.

Client/patient involvement, through the use of inclusive, participatory research techniques should be considered.

A systematic approach to evaluation – and to ensuring that results are published and disseminated – requires the commitment of those delivering treatment, the involvement of clients/patients, and the support of policy makers.

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